

The Politics of Famine in Sudan

The Case of Dar Hamid and Dar Hamar

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The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.

I dedicate this work to my family, and to the people in the villages of rural Kordofan who have been my main source of inspiration.

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Abstract

This study is about famine in Sudan. The study has sought to explain famine in Sudan in political terms. It presents a critique of conventional famine theory which emphasises the primacy of natural causes such as drought. The study recounts the conditions which generate recurrent famines in Sudan in recent history, highlighting domestic and international determinants. It examines five major theories of famine, giving a critique of each of the theories examined. The theoretical appraisal reveals the inadequacy of famine theory which we argue is partly responsible for the persistence of famine in Sudan and elsewhere. This study has aimed to contribute to a better understanding of the phenomenon of famine with a view towards eliminating it. It offers the view that famine can only be understood in a broad historical context which brings out the evolution of economic and political relations within the Sudanese society, and its subordination to the international market economy which determines differential access to resources including food for different social groups such as renders some groups vulnerable to famine, while others escape and may even "benefit" from it. The study depicts two rural communities from *Kordofan* who were unduly affected by the recent famines; and a field-work study has been carried out to trace the historical processes underpinning their political marginalisation and economic exploitation which we consider to be responsible for their vulnerability to famine. These processes are accounted for on three levels: on a macro-level, considering internal and external constraints influencing state policies; on a regional level, and on a micro-village and household levels. Such an account is necessary for a better understanding of famine since conventional famine theory has largely focused analysis on macro-level policies, ignoring what takes place among the rural village communities who actually experience famine. The study shows the interconnectedness of processes on the three levels. The conclusion that can be drawn from the study is that famine becomes endemic among the poor and powerless groups. "Empowering" the rural populations would be the single most important action towards eliminating famine in Sudan, and elsewhere. However, "empowerment" of the local communities would be of little benefit to them unless the international economic system recognises the welfare of such groups.

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Preface

Famine still represents one of the big challenges in the modern world. This study is an effort towards a better understanding of the phenomenon of famine. The study takes the case of Sudan; a country which has been affected by recurrent famines in recent history. But even in Sudan, not all Sudanese have been affected by famine. It is a universal character of famine that it affects only the poor and powerless. No rich or powerful among the Sudanese have suffered. The study focuses on the fortunes of two rural communities in one of the underdeveloped and marginalised regions of Western Sudan; who have been devastated by the spate of recent famines. The study traces the origins of their vulnerability to long-term processes of political nature which render them extremely exposed to natural shocks such as drought. Field-work research has been conducted among the two communities of *Dar Hamid* and *Dar Hamar* of Kordofan over a period of six months between December 1992 and May 1993. The researcher is on a scholarship grant from the University of Khartoum; Sudan.

Map of Sudan



Chapter 1

INTRODUCTION

Hunger and famines still persist in the contemporary world; in Africa, Asia and Latin America millions go hungry everyday in a world equipped with the technical and scientific capabilities to produce abundance of food than ever before. Famine represents one of the big challenges in the contemporary world. What is lacking to eliminate world hunger is the political will to enforce one of the most sacred rights of all human-kind: the right to food. Deficient theory to explain the recurrence of food insecurity is partly to blame. Famine theories have offered partial, often conflicting explanations. If famine is to be prevented, it must first be understood. Effective policy depends on good theory, and the theory of famine is confused (Devereux 1993). This study is about the politics of famine in Sudan: one of the countries most affected by recent famines. Existing literature on famine in Sudan has focused either on macro-structural processes such as overall national food production and consumption levels (O'Brien 1986; Shepherd 1988); or on micro-level processes (De Waal, 1989, Keen 1994). This study takes a political economy approach by combining both macro- and micro- level determinants of famine, and related these to the actual conditions of the people in *Dar Hamid* and *Dar Hamar*; two rural communities in *Kordofan* who have been unduly affected by recent famines. But famine in Sudan and elsewhere is part of a wider global food problem.

THE DIMENSIONS OF THE WORLD FOOD PROBLEM:

The conception of a world-wide 'food problem' did not come into existence until World War 2, when in 1943, in Hot Springs, Colorado, a conference was held which "looked forward to a world free from hunger" (Grigg 1985: 1). Since then there has been a proliferation of institutions and literature which focused on fathoming the dimensions of the food problem. This effort helped to heighten popular awareness about the existence of a global food problem. The world food problem is characterised by a paradoxical situation where in one part of the world there is abundance of food supply and overproduction, while other parts of the world suffer from chronic or acute food shortages and periodic famines. In fact, we live in a world of plenty, a world which produces and consumes more food than it needs. Yet, each year millions die of hunger due to poverty and the politics of food. On a global level, abundance best describes the world's food supply. Abundance characterised by such great amounts that per capita food intake would amount to three thousands six hundred calories for every man, woman and child on earth if the available food is equally distributed among the world's

population (Lappee 1991). Yet it is estimated that around the world, a thousand million people are chronically hungry, twenty times the population of Britain. The cause of this is not famine or relative scarcity, but long-term poverty in a context of an ill-divided world (BBC 1991). A world where one half could watch the other half starve to death on television; as happened recently in the 1980s and 1990s in Ethiopia, Sudan, and across the Sahelian belt.

This paradox of acute and chronic hunger amidst plenty, implies that large proportions of populations in many parts of the world; especially in Asia, Africa and Latin America live in conditions of chronic hunger and related problems of undernutrition (defined as low calorific intake), and malnutrition (defined as unbalanced diet deficient in protein and vitamins), or both, in a world of abundance and mounting grain surpluses. The exact numbers of people living under conditions of chronic hunger cannot be precisely known. Various estimates give widely different numbers. As early as 1950, John Boyd-Orr; the first Director of the FAO claimed that: "a lifetime of malnutrition and actual hunger is the lot of at least a third of mankind" (Boyd-Orr, 1950: 183). Whether the Director's assertion was true needs to be taken with caution, but it highlights two important points: that the number of the world hungry is sizeable indeed; and that the problem is not new. In 1973 the World Bank estimated that 1373 million people in developing countries are undernourished; constituting 71 per cent of the populations of the developing countries, the majority of whom (924 million) are in South and South East Asia (Grigg 1985: 30). Other estimates put the number of undernourished between half a billion to two billion people. The World Food Council estimated about one billion people to be chronically hungry in the mid-1980s. The World Bank estimated 740 million people to be undernourished in some 87 developing countries (Barraclough 1991). By the beginning of the 1980s the proportion of the undernourished ranged from about 10 per cent of the population in some countries to 40 per cent of the population in other countries of the third world (Grigg 1985: 26). Malnutrition is the world's biggest killer. It afflicts a fifth of humanity. Most of those who die- between thirteen and eighteen millions a year- are children under five (Lipton 1991). Adults face malnutrition-related problems in working, and health problems associated with acute hunger for about one in eight to one in ten of the population in poor countries. Sen (1981) distinguishes between two types of hunger: "endemic" or "normal" hunger and "acute" hunger; and states that "normal" hunger is a regular feature of life in many parts of the world with which people have learnt to live, but this "regular" starvation has to be distinguished from violent outbreaks of famines (Sen 1981: 39). And that acute hunger like the experiences of famine are exceptional; which nonetheless portend of deep-rooted social malaise in the societies in which they occur. Kates et al (1988) have pointed out that hunger is not confined exclusively to third

world countries. They have indicated that in the USA, the richest country in the world, in 1985 there were some twenty million Americans, nearly one-tenth of the population who did not have enough to eat due to poverty. Pockets of malnutrition continue to exist in parts of the developed world.

On the other hand, in some parts of the developing world where some countries have achieved high levels of food production comparable to that of advanced economies, problems of hunger and malnutrition are as pervasive as in other parts of the developing world. This suggests that high levels of food production and the physical availability of food do not provide sufficient guarantees against hunger. In Latin America, there is no shortage of food for those who can afford it; like in Mexico and Brazil where the quantities of food available are well above national requirements. In Mexico, the FAO estimates that food availability is almost the same as in many industrialised countries of the North (Barracough 1991). And Brazil produces an abundance of food comparable to that in America and Europe, but the majority of its people are poor, and many go hungry.

Brazil is usually described as the coming country. In the twenty first century it would be one of the largest industrial countries in the world. But, the inequality in Brazil is such that people with an average per capita revenue close to US\$ 2000 a year: the poor in Brazil are easily sixty per cent. The Minister of Agriculture in Brazil said that there is 90 million Brazilians; about two thirds of the population did not have an adequate caloric intake (George 1991).

Appalling conditions of hunger and malnutrition still persist in Mexico and Brazil. India is another good example for the existence of hunger amidst an abundance of food supply. India has built up food stocks of between twenty to thirty million tons of grain mostly wheat, in government food reserves, but most of the poor cannot afford to buy that food. So India has come to have the very remarkable success in improving grain production, in both rice and wheat, while poverty remains so severe that the problem of undernutrition while it gets slightly better does not substantially improve (Lipton 1991). The clear inference is that hunger can be pervasive in the midst of plenty. And for reasons to understand hunger, it is necessary to examine themes other than availability of food. These facts point to the firm conclusion that the problems of hunger and malnutrition have no necessary correlation to the overall availability of food, nor do they suggest that increased volume of food output can guarantee food for all groups. Indeed, overall availability of food and increased food production can go hand in hand with increased poverty and food insecurity (Sen 1981, Dreze and Sen 1989; Barracough 1991). Politics, not availability, lies at the root of the food problem.

The recurrence of hunger and famines during the 1970s, 1980s, and early 1990s is the most stark manifestation of the problem. Famines have recently occurred at a time when food production has registered unprecedented growth in output on an international scale.

In Western Europe and the USA, immense increases in food output of an annual growth rate of about 3.5 per cent has been made possible by the improvements afforded by plant breeding science; in introducing high yielding varieties and hybrid strains, by the substitution of the agricultural labour force by machinery and power traction. These innovations have indeed brought complete transformation of agriculture; almost an agricultural revolution. This has led both to a reduction in the cost of production concurrently with a massive increase in agricultural productivity. Agricultural science and research also contributed by making available to farmers a vast array of fertilisers, pesticides, herbicides and fungicides. Active government support to agriculture has been crucial to boost production and sustain agriculture (Raikes 1988; George 1978, 1976; Boserup 1981. 1965; Gribben 1976).

Livestock breeding, on the other hand, received a similar revolutionising transformation. Improvements occurred on disease control and veterinary services, livestock breeds, balanced feeds, fattening and artificial insemination techniques, range management and grass varieties. These revolutionising trends have greatly transformed agriculture in the developed world. The increase in production in food grains, especially in cereals, has been dramatic, leading in effect to a glut in the market and a problem of overproduction. Food grains as well as dairy products, canned and refrigerated foods continue to pile up in stores in America and Western Europe. Huge surpluses of foodstuffs have come to pose problems to farmers and governments alike; problems of pricing, marketing and storage. As stores overflow, policies needed to be devised as to cope with the emergence of "grain mountains", which also needed considering future food production strategies. Cutting down on cropped areas of land, dumping part of the surpluses, and maintaining government support to farmers in forms of subsidies have been some of the policy options adopted by the overproducing countries in order to stabilise production and maintain prices (Gibbon et al 1994; Raikes 1988; Grigg 1985; Sinha 1978; Barraclough 1991).

Subsidising agricultural production has since World War 2 been one of the fundamental strategies in food policy and agricultural planning throughout the advanced world. Subsidies, together with other factors, i.e., technology and agricultural scientific research, have combined to generate surplus stocks which have become a problem. Surplus production has spurred the need for outside markets. As a result, the slogan "trade and aid" became the guiding spirit of the day; pushed with all vigour. Thus an aggressive international food trade was evolving, dominated by a few of the Western surplus-producing countries both on the supply and demand sides of the trade (Raikes 1988; Gibbon et al 1994; Barraclough 1991). The USA is by far the major dominant force accounting for over 50% of the total world's trade in cereals (especially coarse grains). The USA, together with Canada, Argentina, Australia and the EU account

among them for some 85-90 per cent of total world's export of grains. While the North American "prairies" overwhelm world trade in cereals (maize, wheat, soybeans), the EU countries, on the other hand, have become the major international dominant exporters of dairy products (Raikes 1986). This has followed a major shift in European agricultural policy since the turn of the century. The major emphasis behind this shift, induced by pressure of competition from the "prairie lands" has been from cereals to dairy production. Since then, protection under the Common Agricultural Policy (CAP) has produced "persistent and substantial surpluses", such that the EU now "accounts for over 50 per cent of world exports for most dairy product categories, this rising to almost 70 per cent for Skim Milk Powder (SMP) (Ibid).

In the context of global food overproduction, a process of "specialisation" in the world food trade seems to have emerged since the 1950s, with North America predominating the trade in cereals while the EU dominating dairy products including meat. The imperative to market the surpluses necessitated the active promotion of increased market demand in outside "spheres of influence" for the food trade. Thus, parts of the third world; in Africa, the Middle East, Southeast Asia became target markets for the major food exporters. However, during this time in the 1950s and 1960s most African countries were self-sufficient in food grains. Added to that the urban population in African cities was yet small, and smaller still was its middle class element, such that its need for "refined urban foods" was small and relatively inexpensive. The prevailing circumstances in Africa during the 1950s and 1960s, therefore, made marketing US and EU food surpluses in Africa on profitable market terms untenable. It was conceived that the only possible way of disposing of these surpluses was to be on concessional terms in the form of aid or on low-market price concessional long-term loans. The dual objective of the food aid and concessions was meant both to offload the surpluses while at the same time pushing forward and promoting market demand overseas, by gradually altering food tastes, especially targeting the emerging urban classes for the new foodstuffs in the new markets. It is during this period that policies were designed to encourage urbanisation. Under these circumstances, ushered the era of "trade and aid" in which the American Public Law 480 was set in force in the 1950s (Tarrant 1980: 232). Between 1959 and 1964 "food aid accounted for no less than 34 per cent of total US grain exports" and, conversely "it accounted for fully 57 per cent of developing countries imports of grain from the USA over the same period" (Ibid). Although it is certainly in the interests of America and Europe to export their grain surpluses to the third world, this strategy has damaging effects on the long-term prospects for countries like the Sudan of feeding their own populations. The export promotion of food aid has been detrimental to domestic food security in developing countries. As Raikes has pointed out:

aggressive export promotion by Europe and the USA, making use of both food and other forms of aid has combined with policies in most of the states of Sub-Saharan Africa, to generate patterns of urban food consumption and of food processing and even production which are grossly out of line with the capacities of the countries in question to support and with negative effects upon the food availability and security of poorer sections of their populations (Raikes 1986: 169).

Here, the activities of agribusiness transnational corporations (TNCs) is of immense significance in their oligopolistic control over the international grain trade. The world grain market has been characterised by the predominance of a small number of countries in the developed world both on the supply and demand sides. As a result, over 85% of wheat and 80% of the coarse grains entering the world markets go to the developed countries. Transactions are governmental, therefore are influenced by political considerations. Grain trade, thus becomes part and parcel of the politics of international power relations. Many authors have pointed out that this strong oligopolistic control over international grain trade and the issue of political power involved in it lie at the heart of the world food problem (Raikes 1988; Bush 1988b).

Agribusiness TNCs have been criticised for their role in channelling third world agricultural activity to meet the market needs of advanced industrialised countries. This they do by their effective control over production, pricing, processing and distribution of food stuffs world-wide. Bush observes that "[a]gribusiness has established a food system - an international supermarket- where low nutrition luxury food stuffs are grown in poor third world countries to export to out of season European dinner tables" (Bush 1988b 6). The case against agribusiness is critical of the way they structure the agro-food system in a way that increases inequality, dependency, poverty and insecurity.

The net effects of the "trade and aid" strategy over the years since 1950s, with its concessional terms and direct food aid, have been so irresistible for third world governments such that demand for these products continued to rise steadily. Third world governments saw in the ready provision of foodstuffs on terms well below international market prices, an opportunity to relieve their strained economies and their dwindling foreign reserves. At the same time to keep happy and content the potentially disruptive urban populations by providing them with cheap food. The fast growing urban populations in third world cities, thus developed new tastes for the new products. White bread, milk and milk powder, butter and canned beef have become part of the preferred diet for the emerging middle classes. The promotion of overseas market demand, promoted initially by food aid, ultimately set in motion a process in which "North American's pattern of consumption is being internationalised among the urban middle classes of the third world, involving the increasing importance of wheat products, dairy products and meat" (Raikes 1986: 167).

This changed pattern of food consumption has had profound effects not only on local food production, but also on domestic politics, since urban demands on the state came to

determine the political survival of governments. Local food producers, mainly small peasant farmers, lost a big share of their domestic market to the imported foods. This combined with discouragingly low food prices which made agricultural food production an unprofitable enterprise. Added to that most African countries taxed agriculture heavily as a perennial source of revenue to promote other sectors of the economy; a strategy which stands in direct contrast with US and EU strategies which consistently subsidise agriculture. With declining domestic food production, African states became increasingly dependent on food imports from outside to quieten the demand of the volatile urban classes for refined foods. And with African economies meagre foreign reserves, they cannot sustain long-term food security relying on food imports, thus food insecurity and political instability go hand in hand.

The end result of the US and EU strategy of export promotion led by the aid programme, ultimately created a state of dependency in African countries on imported foodstuffs from external suppliers. The risks inherent in such a dependency are that the food security of African states has now become a strategic issue that is beyond their immediate control, and that depending on the international market for food implies that African states can have no control over prices either of food grains or for their own exportable products. Internal food security becomes firmly skewed in the ability of the state to purchase food from the international market. The avoidance of famine implies that if the state has the foreign exchange necessary to buy food, there would not have been famines developing in poor third world countries. The danger of dependency on external supplies of food resides in the fact that any shifts in international market prices either of foodstuffs or for their primary exports would precipitate the food security situation internally. Conversely any internally-induced shocks (such as a drought) can also undermine food security in two ways: (a) directly: by reducing food supplies from own production thus upsetting the very delicate balance by increasing the food deficit gap and impelling the need for more supplementary food imports; and (b) indirectly; through reduced general agricultural production such that exportable agricultural products needed for foreign exchange earnings to finance food imports are also substantially curtailed. The state of dependency on food supplies from outside sources has consequently put the food security of African states like the Sudan in a precarious position, and especially for the poorer and vulnerable groups in the rural areas. Indeed the famine experiences over the past decades is a clear illustration of these long-term internal and external processes. As we will see later, while these processes are progressively eroding the internal and local-level food security, short-term shocks can deal the final blow and turn a long standing vulnerability into a famine. The prevalence of the experiences of hunger and famine in many parts of the third world, and especially in Sub-Saharan African countries like the Sudan, suggests a clear polarisation between

rich and poor both on an inter-state global level, and within individual states between different social groups. Sudan is one of the countries worst affected by the recent famines.

FAMINE IN SUDAN:

The case of Sudan indicates that the underlying factors here explain the paradox of hunger in a world of plenty. Sudan is one of the countries worst hit by recurrent droughts in Africa. The news coverage of Sudan's crisis concentrated on the famine, a tragic, but relatively a short-lived emergency; tended to overlook the deeper underlying trends that hunger in Sudan is a long-term condition, brought on as much by natural disaster as by poverty. Yet, famine is a very rare occurrence. Famine is the end of a very long process, it is a crisis in society, and it takes a long time to build up, so that when we see the images of starving people, literally collapse and succumb by the side of the road, this means that these people have gone through a very long process of scarcity, of selling off resources, of out-migrating, and finally we see them in the last extremity when they reach the stage of destitution and exhaustion. One estimate of mortality from famine in Sudan during the 1980s was estimated as running at a rate of about 150 persons per day as a result of starvation and diseases (Sudanow 1985: 7-9). But all this loss could have been avoided. Sudan is a country of great agricultural potential, which can very easily grow enough food, so that there is ample food for each Sudanese person to eat well if that food is equally distributed. Agricultural production can be made much more intensive in the Nile Valley, wheat, rice and grains production can be pushed much more higher in that area, so that Sudan could produce ample food to feed itself and become a major exporter (Lipton 1991).

Sudan is the largest country in Africa; about the size of Western Europe. Not only does it have the potential to grow food, but it has for many years produced enough for its own people and a surplus for export. But this abundance is not shared equally among its 22 million people; most of whom are only too poor to buy food if their animals die or their crops fail. In recent times, a number of man-made factors have been working against them. Many people have been pushed into marginal areas, by modern commercial farming where much of Sudan's best land has been turned over to export crops. These lands are rich clay soils covering the best parts of the central rainlands of Sudan, which formerly supported sedentary pastoralists who practised small-scale farming and animal husbandry. However, since the late 1940s, these legitimate owners of the land have been systematically pushed aside by the expansion of commercial farming where big commercial farmers - with the active support of the state - appropriated the best lands each farm is about 1500 *feddan*, some farmers owning more

than one farm. So by the time the latest drought struck, Sudan's people were already on the brink of disaster. The catalogue of adversities is not yet complete. There have been long years of drought, gradually increasing over the past two decades, as part of global trends associated with secular changes in the global climatic conditions which have little to do with the local farmer but have their origins in the emissions of gases emanating from industries (Hulme 1991). Sudan hosted over a million refugees from neighbouring Ethiopia and Chad (see appendix 1). The Sudan also had had one of the largest refugee communities in the world. A civil war that has been raging on for fifteen years, with a cost on the war machine estimated at one million dollars a day, has drained the country's resources, driven the local populations from their villages, and disrupted production. The catalogue of adversities can be endless, but famines have become a recurrent phenomenon in Sudan.

(a) The 1973 Famine:

Sudan has suffered three major famines in twenty years - between 1973 and 1991. The Great Sahelian Drought which devastated the Sahel countries in 1973 had left Sudan relatively unscathed (O'Brien 1986). O'Brien argued that:

the conditions which were responsible for Sudan's good fortune derived from a pattern of agricultural development during the 1960s which was rare in Africa and indeed in the entire third world, based as it was on the expansion of capitalist food production supporting internal markets rather than expansion of export production (Ibid: 193).

The expansion of capitalist food production supporting the internal market cannot, as O'Brien argues, provide a comprehensive explanation of why Sudan escaped the 1973 famine. Rather than being a mitigating factor in containing famine, commercial food production has indeed been one of the major factors contributing to the development of famine in recent decades. Not only is the monopolistic control of the grain merchants of both the domestic and export trade an immediate cause of the famine, but also the way in which they exploited the land caused deep mining and degradation of soils. As we will see below, capitalist commercial farmers control the domestic grain trade entirely for their advantage, and act through cartels of regional grain traders who fix extortionate prices, especially during times of food deficit.

The rural populations were relatively wealthy until the 1970s and economically able to afford to buy available food, than is the case in recent years when they have become progressively poorer. Although commercial food grains are available in the market in the recent famines as they had been in the 1970s, the ability of the rural populations to avert the 1970s famine was therefore a condition of their ability to buy the available food. Using Curtis's concept of "assets" (Curtis et al 1988), the assets conditions of

Sudan's rural populations were then significantly healthier to insulate them from the ravages of the drought, as well as from the extortions of the grain merchants, given the fact that until the 1970s Sudan's GNP per capita income was US\$ 400 compared with US\$ 220 that of other Sahelian countries (Sutcliffe 1986). This was a reflection of better conditions in the rural/urban terms of trade.

Additionally, the Sudanese state was until then keeping a measure of institutionality (i.e. the state is committed and able to carry out the dictates of its institutions) and responsibility, and was able to procure purchases of food from the international market. Indeed, O'Brien notes that "observers in *Khartoum* saw transport planes taking off from the capital to deliver relief food supplies to *DarFur* towards the end of this period" (Ibid: 193). This suggests that the state was indeed concerned and able to procure food and to deliver that to deficit areas. Individual households were able to buy their food needs from the internal market. The "ability" to buy the "available" food, was the reason why Sudan was able to escape the 1973 famine relatively unscathed, not the "availability" of commercial food. The massive expansion in commercial agriculture during the 1970s and 1980s did not, however, avert the famines in 1983-85 and 1990-91. The physical availability of food in the market, proved no guarantee against hunger (Sen 1981, Dreze and Sen 1989). Indeed, it could well be that rather than preventing famine, commercial capitalist agricultural food production is the underlying cause for the development of famine in Sudan. It has been recognised recently that famines as disasters can result from the conscious exercise of power in the pursuit of gain and advantage (Keen 1991, 1994, Duffield 1992). In Sudan, the agrarian bourgeoisie wield immense political and economic power over the state's apparatus. The exercise of power for gain could be that famine conditions can wilfully be allowed to develop on the calculation that higher gains could be reaped by the agrarian class from the conditions of famine. In such a situation where the agrarian bourgeoisie stands to gain from famine conditions, not only is famine "good for business", but that its development may be consciously allowed. In this political dimension in the exercise of power, famine represents a moment in the process of assets transfer from the poor to the rich, and its recreation ensures the systematic consolidation of the power of the rich and powerful vis-a-vis the poor. "Within this framework", Duffield notes "it is possible to regard famine as an outcome of a process of impoverishment resulting from the transfer of assets from the weak to the politically strong" (Duffield 1992: 3). This indeed could explain why famines continue to ravage the Sudan's poor, while in most of the Sahelian countries drastic measures have been taken to prevent repetition of the disaster (Sen 1981; Shepherd 1988, Barraclough 1991). In this context, it is instructive to observe that per capita food output in Sudan declined during the 1980-86 by 3% compared with 1974-76 level, while other African countries experienced much higher declines without

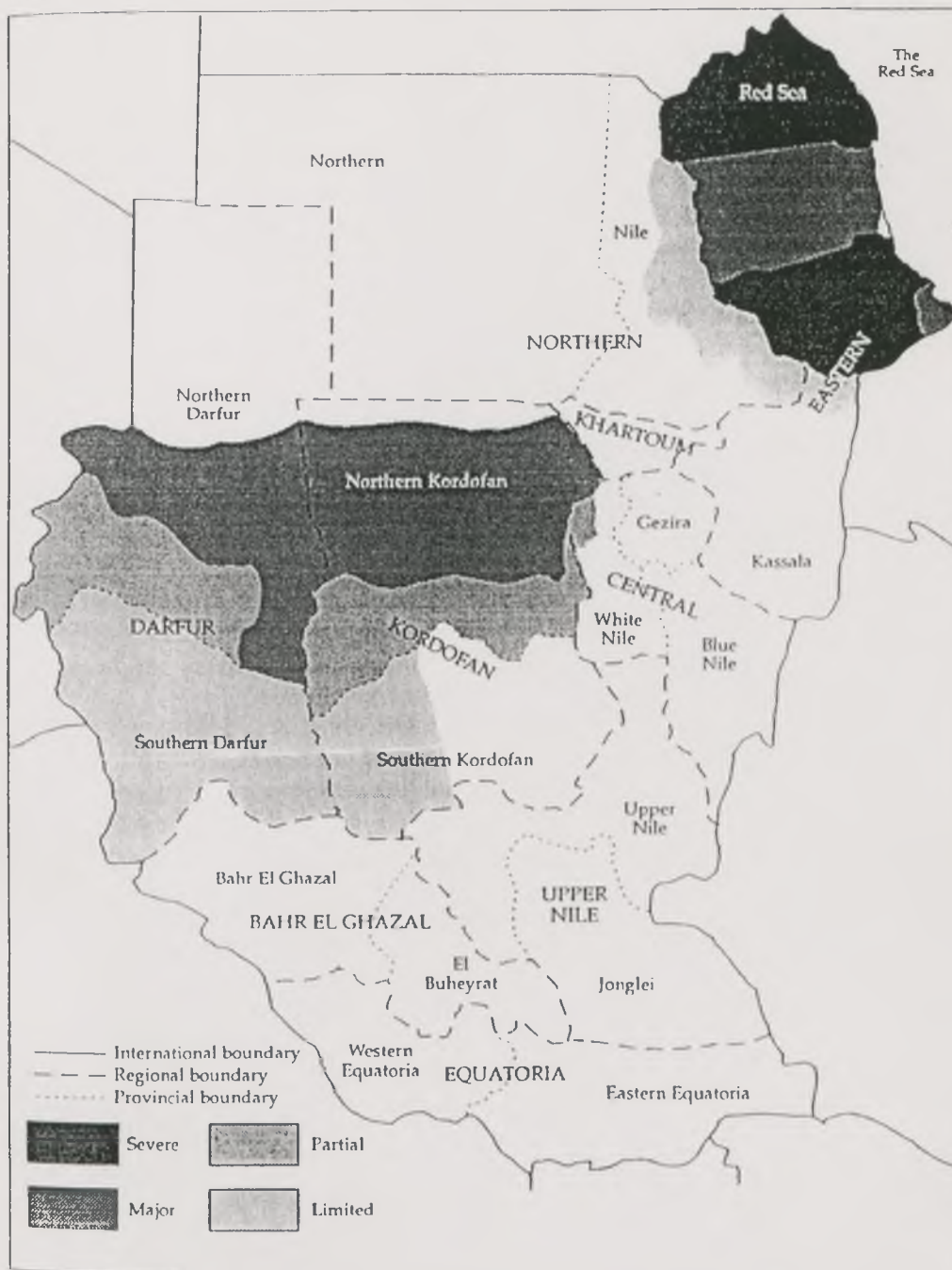
actually experiencing famines as Sudan did. For example, in Zimbabwe, per capita food output declined over the same period by 23%; in Senegal by 33%; Kenya by 33%; and in Botswana by as high as 44%; without these countries having experienced famines (Dreze and Sen 1989: 33). Many African states have been able to avert recurrence of famine by direct government intervention and support, like Burkina Faso, Cape Verde, Kenya, Lesotho, Tanzania, Uganda, Zimbabwe. Many others have taken serious government action to avert a repetition of famines such as Mali, Mauritania, Niger, Chad after the 1973 Sahel famine, Ethiopia after the 1985 famine (Ibid: 71). Sudan stands out as a sad exception from the marvellous record achieved by other African states in stemming famines.

A decade later from the 1973 famine, another famine devastated Sudan. The famine of 1985 reinforces the view that capitalist food production in the commercial plantations in the clay plains of East-central Sudan could not guarantee food security. Indeed, instead it could contribute to food insecurity of the mass of populations in the process of asset transfer described above.

(b) The 1983-85 Famine:

More than half of Sudan's total population of twenty two millions were estimated to have been affected by the famine conditions in mid-1985. About 2.5 millions were classified as vulnerable (Sudanow 1985: 7-9). Of these about one million were forced to leave their villages and seek refuge elsewhere in the country as migrants and squatters in shanty towns surrounding the main urban cities. Of those displaced, *Kordofan* had a share of more than 322000 about a third (see appendix B). By mid-1985, the UN estimated 12 million Sudanese to be at risk of starvation (O'Brien 1986). By the end of 1985, some five million people were still affected by famine conditions; requiring over 500 thousand metric tons of food at an estimated cost of about US\$ 30 million (Abdel Ati 1988: 267). The worst affected regions were the Western provinces of *Kordofan* and *DarFur*, and the inhabitants of the Red Sea Hills in Eastern Sudan. *Kordofan* and *DarFur* among them accounted for about 5.7 millions of the estimated total affected populations; and for about 2 millions of the 2.5 millions classified as vulnerable (1.2 and 0.8 million for *Kordofan* and *DarFur* respectively). Of those classified as at nutritional risk groups, especially pregnant and lactating mothers and children under five, of these groups about 700 thousand were in *Kordofan* and 800 thousand in *DarFur* (Oxfam, UNICEF and *Kordofan* 1985a, b, c 1986). It has been estimated that while about 200 thousand children can die from disease in a "normal" year in Sudan, in 1984 the number reached between 350000 and 700000, and in 1985 the number reached about a million (Newsweek "We are the Children", 3 June 1985:18-26). One in ten of Sudan's children die in their first year. Those who survive malnutrition and disease, still face an

Figure —Map of areas of chronic food insecurity in the mid-1980s, Sudan



Source: Based on a map received by the authors from the World Food Programme, Khartoum.

Note: Mapping of population groups by severity of food insecurity is based on a combination of ecological variation and measure of food gap by area.

early death. life expectancy is only forty eight years. Oxfam's nutritional surveys in *Kordofan* and *DarFur* revealed levels of malnutrition four times the normal in Africa (Cater 1986). The surveys revealed that severe malnutrition and undernutrition were widespread among the rural communities, especially among children and lactating mothers. In *El-Malha* camp, for example, vitamin deficiency was reported among 92% of the children, and among 77% in *Tendelti* (Baldo, cited in Abdel Ati 1988). And among the *Beja* nomads of Eastern Sudan, it was reported that only about 27% of the children in *Haya* area were not malnourished (Oxfam 1984). These widespread conditions of malnutrition among the famine-affected communities in Western and Eastern Sudan compared with a low percentage level of malnutrition of only 1% in the Central Regions of Sudan (Ibid), reveal the contours of inequalities and differences in standards of living within Sudan.

Livestock losses were estimated at between 50-70% in *Kordofan* and *DarFur* in 1985. Animal wealth as the principal form of asset was lost by death and sale. In *Kordofan* in 1984/5 animal losses by death was 78% and 22% by sale (Abdel Gadir 1988). Total animal loss in *Kordofan* during these years was in the region of 8.1 - 9 million heads (of cattle, sheep, goats, camels and donkeys combined). In 1984, Eastern *Kordofan* alone lost an estimated 40% of its animal population. Oxfam (1985) reported losses between 70% and 80% in Northern *DarFur*. Many have lost whole herds, and came out of the drought only narrowly with their lives saved. The decimation of animals for these groups, especially among the nomads, was catastrophic since it meant loss of their only means of livelihood, and was therefore the more devastating because it entailed permanent vulnerability and insecurity. Moreover, these groups have a low level of literacy, of only about 3% among the nomad populations, and have few of the skills required for settled or urban work. These represent limiting factors on the possibilities of access to alternative means of livelihoods in urban centres. Their vulnerability becomes even more aggravated by trying to seek refuge in urban centres where they end up forming the large pool of the urban poor in slum areas.

In 1984/5 animal prices in *Kordofan* fell by about 74% from that of 1981/2 (Ibrahim 1985). By 1985, a head of cattle would fetch about S£ 121 in *El-Obeid* market; a value which would pay for approximately one sack of *dura* and for only 0.8 sack of millet in the same market. While in the market of *Nyala* in *DarFur* in December 1984, one head of cattle was sold for S£ 182, enough to buy only 0.8 sack of millet (calculated from Bush and Pankhurst 1988; and Tesfaye et al 1991). The prices of smaller animals were even lower. People reported that village traders would not accept a goat in exchange of one *malwa* of *dura*. One would need two goats to buy only one *malwa* (1 *malwa* = appr. 3.2 Kgs). People also lost their assets, especially women lost their jewellery and gold, and merchants offered very low prices. People reported that some merchants made quick

fortunes out of buying cheaply from the distressed people and selling them very dearly, thus became very wealthy during the famine, to the extent that some of them wished the drought would continue for some more years. This is a worst example of the process of asset transfer which also works in another direction where merchants charge exorbitant prices for their goods. A sack of *dura* would cost about S£ 200 much beyond the reach of the overwhelming majority of the rural populations. With extremely low prices of their livestock and valuables, and rocket-high prices of basic food grains, the populations were unable to face the gathering disaster. Bush observes that in the circumstances, it was impossible for an average family of seven to acquire its daily grain requirements of 1 *malwa* which cost between S£ 5-7 (Bush 1988).

Mass migration from the rural areas to towns and relief camps ensued. Ibrahim (1985) found the number of the displaced from *Kordofan's* rural areas to be 200,000 received in camps around *El-Obeid*, and another 81,000 who migrated to the Central Region and the *Gezira*. Another 41,605 displaced persons from *Kordofan* found their way to camps and shanty towns in and around *Khartoum* and *Omdurman*. The majority of these immigrants to the capital were from Northern *Kordofan* pastoralists who were particularly hard-hit by the famine. Bush and Pankhurst (1988) gave the figures that by 1985, of some 360,000 displaced people congregating in the Central Regions of Sudan, about 70,000 were from *DarFur*, 135,000 from *Kordofan* while some 200,000 moved to live with relatives in the irrigated schemes (see appendix 2).

The magnitude of the human tragedy was further compounded by the greater scale of animal decimation. Livestock population in *Kordofan* was estimated as numbering about 12.4 million heads in 1983 and 13.5 million in 1984; out of a national figure of about 50 million (Regional Ministry of Animal Wealth, *El-Obeid*, 1985); with a national average growth rate estimated at 4.1% between 1976-80, and 2.25% between 1981-85 (calculated from Tesfaye et al 1991). The stark realities about the devastation of the famine in Western Sudan have no simple explanation, but are the outcome of a multitude of a complex composite of factors. It is only possible to give a general schematic overview of broad categorisation on the type of factors which caused the famine. It is possible to distinguish between (a) long-term processes of political-socio-economic character which have been responsible for creating the conditions of impoverishment, vulnerability and insecurity; and (b) short-term shocks in the form of natural fluctuations and the drought arising from these fluctuations.

The central government, following the flood of displaced populations from the affected regions, feigned a programme of rehabilitation. A component of the programme was a campaign to move the displaced populations in homebound repatriation; almost an act of mass eviction, from camps surrounding the Capital City. Each family was given a sack of *Dura* and free transport to go back to their villages for cultivation. The

political motivation of such policies is not difficult to understand. The presence of these groups in the centre of power, was deemed dangerous for the dominant ruling establishment and considered subversive for the status quo. These fears were often dressed up in the guise of national stability and security. These policies of forced repatriation were often justified in terms of directing the displaced to areas of production. The net result was that, either through persuasion or coercion, the majority of the displaced were moved back to the countryside, without the least guarantees or basic securities. The remaining fragments of the displaced populations were subjected to systematic policing. Al Bashir described the situation:

While freedom of movement during civilian rule had been guaranteed in the national constitution, ... attempts were made to restrict access to the main cities. Town planning and municipal authorities launched several campaigns to dismantle illegal settlements (Al Bashir 1991: 49).

(C) The 1990/1 Famine:

The 1990-91 famine was very widespread affecting large areas in Sudan (Al Bashir 1991; FAO 1991; Kabbalo and Bush 1991; De Waal 1991). The difference between this famine and that of the 1970s and 1980s is that those previous famines affected traditionally marginalised areas in Western and Eastern Sudan where famine became an endemic phenomenon, but the 1990-91 famine affected in addition to these regions, other areas and groups hitherto considered immune from famines. These areas and groups included mainly the poor, the working classes, the unemployed, and many sections of those formally employed in the public government sector who mainly live in towns. Many households in the towns experienced hardships. Food became scarce in the rural areas and prices soared quickly in the towns beyond the reach of many households. Mass movements from the countryside to the towns ensued; the majority flocked to the centre. By August 1991, the Relief and Rehabilitation Commission (RRC) estimated the number of the displaced swarming into shanties in and around the capital to be in the region of 1.5 million, mostly from the South and West. From the point of view of the authorities, these were considered "illegal" residents, and were not entitled to rationing. Their dwellings had been the target of frequent raids by the municipality, the police and security forces. In desperation, the authorities finally resorted to the physical demolition and burning of shanty dwellings and forcible removal of people. (*Kasha*, i.e. forced repatriation).

Yet with all stark evidence, official government response has been almost "criminal". Government authorities denied the existence of the famine. There has ensued a political and ideological war following Sudan's stance siding with Iraq in the Gulf war. The donor community, led by the US and Britain, imposed restrictions and conditionalities on food aid to Sudan. The overthrow of the democratically-elected government of *Sadiq*

al-Mahdi in June 1989 by a military coup led to the mandatory enforcement by the US government of Section 513 of the Foreign Assistance Appropriations Act which immediately prohibits further economic assistance to a country where a democratically-elected government is overthrown by a military action (Kilgour 1990: 127). The Sudanese authorities, on their part, refused to comply with American terms, and refused to declare the country in need of emergency relief. Instead the authorities insisted that there was a temporary food-gap. The wranglings and recriminations on both sides were to cost hundreds of thousands of lives.

With very limited supplies of food, the government was virtually paralysed. A number of measures had been tried to ration the limited supplies, control prices, restriction on grain movements, ban on private trade control over grains etc.. The government finally had to adopt a "life-boat strategy " in which it committed the available supplies to the urban populations through rationing, while ignoring the extreme hardships in the countryside. The significance of this famine is that while it affected larger proportions of the Sudanese populations, government action was directed to the towns as a matter of political expediency and ignoring the politically weak populations in the countryside. The neglect inadvertently led to mass movements from the countryside to the towns. The development of a famine of such magnitude in Sudan shortly after the 1980s famine was inexcusable.

There were a number of official institutions in Sudan whose role is to monitor the national food situation. There is the Sudan Famine Regulations; a detailed set of procedures promulgated by the British in 1920 after the Indian Famine Code (for more details see Shepherd 1988). There is also a "strategic Reserve Stock Unit" affiliated to the Ministry of Finance and Economic Planning (MFEP), including, among other departments, a representative from the Agricultural Bank of Sudan (ABS). The responsibility of the Unit is to monitor food production and the general food situation in the country as a whole and to ensure the maintenance of a permanent strategic grain reserve to be used as a buffer against famine emergencies. There is also the (RRC), a government department with responsibilities for ensuring proper distribution of relief aid, co-ordinating the activities of relief agencies operating in the country and advising on policies for reallocation and rehabilitation programmes. The RRC is also responsible for handling refugee issues. Following the wake of the recent succession of famines, an Early Warning System (EWS) has been installed in 1988, stationed at *Khartoum* Airport and run jointly by the RRC and the Sudan Meteorological Department, equipped with imagery-data-analysis wire. EWS enables the reception and analysis of satellite imagery from METEOSAT IR Space Station "which continuously records a complete scene of Africa every 30 minutes". The system receives, analyses and converts the data into information on near-time situation of rainfall and vegetation. (Hulme 1991: 71). There

seems to be no lack of the necessary institutional machinery to assess famine process, what is lacking is the political will to enforce famine-prevention policies. Yet, despite the evidence of the impending disaster in 1991, the government inadvertently decided to continue with food exports. We can not assess the possible outcome of this strategy, but we need to assess the parameters of the food balance in the harvests immediately preceding the famine.

Sudan's annual consumption requirements is about three million tons of grains. The 1987/88 harvest marked a record of 5.1 million tons. A further 280,000 tons existed in carry-over stock from the previous harvest. There was a poor harvest in 1989 of 2.1 million tons, short of about a million tons from national requirements. This was made up for by importing 318,000 tons of wheat. There was a particularly poor harvest in 1990, in which total cereal production was 1.8 million tons; indicating a deficit of 1.2 million tons. from national requirements (FAO estimates November 1990).

The Agricultural Bank of Sudan, the official institution responsible for the management of the strategic grain reserve, held stocks of 1.59 million tons following the bountiful harvest of 1988. This is more than half a year's consumption for the whole country. In early 1990 the ABS stocks were estimated to be around 200,000 tons. A further 800,000 tons were estimated to be in the hands of private merchants and Islamic banks. Half of these resources were drawn down to meet the deficit in 1990, thus bringing the remaining reserve stock to half a million tons. Heedless of the ABS objections and mindless of the grave risks involved, the government decided to export the entire reserve, exposing the whole country to an unprecedented crisis. De Waal details what happened:

contrary to ABS policy and common-sense risk avoidance, the government decided to export the entire reserve. ABS objections were overruled and from April the ABS played no part in managing the country's food policy. [in September 1990 Mohammed Adam Jellabi, the Director of the ABS, was transferred]. The incoming Minister of Finance, Abdel Rahim Hamdi (previously head of the *Baraka* International Bank), made a radical shift in policy. The *Baraka* and Faisal Islamic Banks were given a monopoly on marketing Sudan's agricultural produce (both domestically and internationally), and a monopoly on importing agricultural inputs such as tractors and fertilisers. The ABS reserve was thus sold abroad by the two Islamic Banks. (De Waal 1991: 111).

The question to be asked is why the government exported the food amidst an impending famine. Here, international interests were the prime movers. After the 1983/5 famine, Sudan -with the support of the World Bank- again exported its grain surplus, amidst another widespread drought in 1990/91. Awad explains that the real problem was caused by the fact that when the drought hit Sudan, Sudan did not have any reserves in the country. That was because the four years which preceded the drought were years in which Sudan exported more than one million tons of food. The amount of food which was actually exported was quite enough to meet all the needs of the country. The advice

of the Production Relations Committee, which asked for the creation of a reserve in the country had been ignored (Awad 1991). The strategy to build emergency grain reserves to avert famine in Sudan was opposed by the World Bank. The Bank's view was that Sudan's comparative advantage is to import food from the world's major grain producers, such as the United States. A Bank's spokesman expresses the Bank's view:

I think our view is that keeping grain; large security stocks that are necessary to deal with that kind of problem, of severe deficit caused by a big drought; is not a paying proposition for those countries; it is simply too expensive. The storage to take that kind of thing is very expensive, is very capital intensive. It is much better for these countries to leave this kind of food security to somebody else to pay the cost; to be paid by the people who are the very large and efficient producers of grain (David Dunn, of the World Bank 1991).

The little grain that was left was in the hands of private merchants, and they taxed prices much beyond the reach of the majority of the population. The situation was further compounded by a diplomatic crisis in Sudan's international relations following its siding with Iraq in the Gulf war. The Sudan allying itself with Iraq antagonised most of Sudan's traditional aid donors, especially Saudi Arabia, the Gulf States, USA and Britain. An added adversity was that many of the Sudanese Diaspora in Kuwait and Iraq were forced to return to Sudan, which deprived the economy of an important part of its foreign exchange earnings. The cost to the Sudan economy has been estimated at around US\$ 400 million, or 4% of GDP: ... equivalent to Sudan's total export receipts and twice the amount spent by Sudan on food imports in 1990 (ODI: 1991,2. cited in Kabbalo and Bush, 1991). Saudi Arabia and the other Gulf States, alarmed by Sudan's official stance, stopped all types of aid. The USA took a number of tough measures against Sudan government. USA insisted that the Sudan government should take measures towards the restoration of democracy and a peaceful settlement of Southern problem. It also wanted Sudan to make an official declaration of famine emergency; conditions which the government categorically rejected. Another hard blow came from the IMF. Following the failure of its negotiations between Sudan and the Fund, the IMF declared Sudan "non-co-operative", the worst brand ever. This further worsened Sudan's prospects either to obtain aid or to make food purchases on the international market. This was reflected in the poor response to extend aid to Sudan. By April 1991 only about one third of the estimated shortfall had been pledged, and only a fraction of that had arrived in Port Sudan (De Waal 1991: 115)).

STATE RESPONSE TO FAMINE: A QUESTION OF LEGITIMACY:

Ultimately, it is the responsibility of the state to take preventive action against famines (Cutler 1991; Dreze and Sen 1989, Shepherd 1988; Pearson 1986). Sudan is not too poor to be able to deploy sufficient national resources to avert mass hunger. But for the government to take effective preventive action depends on the ideological

orientation and political persuasion of those in the seats of power; and ultimately on their political will to take such action.

News of the famine had been duly conveyed to the authorities by the local administrators. District administrators, as part of their administrative duties, in *Bara*, *Sodari* and other Districts in *Kordofan* sent regular reports to the regional government at *El-Obeid* alerting the authorities to the worsening situation in their administrative localities during 1983- 85 and in 1990-91 (personal communication with D.As.). Both the regional and central governments in *El-Obeid* and *Khartoum* were fully alerted to the seriousness of the situation, well ahead of the actual disaster to take the necessary precautions if they wanted to do so. However, the authorities turned a deaf ear to the incoming reports, and a blind eye to all evidence of collapse that was taking place. Instead, neither the regional government nor the central government wanted to hear any "bad news", and chose instead to attempt to cover it up. Instead of redressing the situation by moving in food grains from surplus areas, or stabilising prices, the authorities lost valuable time and resources in the futile efforts of covering up the disaster. The Governor of *Kordofan* at the time *El Fatih Bushara*, a military General; went to great lengths in the covert-up attempt to blatantly deny any existence of a famine situation in *Kordofan*. He entertained an affluent audience to a high-class expensive luncheon in the Hilton Hotel in *Khartoum* and openly denied to his audience any existence of a famine in the region (Bush 1988). But this episode says a great deal about the official mind and attitude towards *Kordofan* and its people.

When news of the the 1983-5 famine finally reached *Khartoum*, the government went a long way to cover it up. The government wanted to give an image of achievement, however false, both to its internal supporters and its external backers. It therefore could not countenance to admit the plight of a mass of rural peasantry who have no political or economic leverage to taint that image. The Sudanese government wanted to give a picture of internal stability and economic efficiency to its external donors in a bid to reassure them to continue their political and economic support.. Most prominent among these external functionaries were the USA, and the international monetary institutions: the World Bank and the IMF, and other donors including some of the Gulf Arab States. These external allies wanted reassurances of Sudan's ability to repay its aid loans, and to ensure good returns on their investments in order to continue their financial and political support. The essential prerequisites to satisfy these demands were internal stability and an efficient market economy. In this context, the occurrence of a large famine was evidently self-defeating to the regime's assurances to its external allies; hence the reluctance to admit the famine. In fact the 1980s famine has been a political malaise to the government in *Khartoum* and an embarrassment to its external backers. Under the circumstances, and in a cover-up attempt to save its face, the central government

mounted regular policing operations in order to remove the displaced from the capital. For the Sudan external backers and foreign donors, the development of the famine engendered consternation and alarm. They were alarmed to witness a telling verdict to the failure of the development packages which they actively pushed since the early 1970s in the tenets of the "open door market policy" akin to *Al Infitah* policy in Egypt at the time (Barnett 1986; Hassan 1986; Gad Karim 1986).

EXTERNAL RESPONSE:

The government of the USA, then the closest ally to the *Nimeiri* regime, watched the situation carefully, and was fully aware of the magnitude of the famine. Indeed, the USA advised the *Nimeiri* government to declare the famine. But this is to be seen in the perceived American interests to intervene by massive food relief, thereby help off-load American grain stocks. Other Western centres, especially the EU, and other international agencies, inter-governmental organisations, the UN, the FAO, all had been well aware of the developing disaster, but paid little concern. The official response of the Western governments had been very modest or non-existent. International and inter-governmental agencies took the approach of "clearing" themselves from responsibility, therefore, opted to publicise the famine on a broad scale. The FAO, for example, stated that there was a wide engulfing famine in 1984/5 affecting some 500 million people in 24 different countries. This publicity and the wide media coverage caused a wide popular outrage in many quarters throughout the world. The pressure put by various organisations on governments to take action, eventually forced them to provide food relief and other forms of aid, against their perceived strategic interests (Cutler 1991: 177-8; Gill, 1985).

DISCUSSION: THE POLITICS OF FAMINE:

Discussions on famine have tended to polarise on two broad lines of debate: naturalist explanations which attribute the occurrence of famine to natural causes such as droughts; and human-factor explanations which trace the problem to social and political phenomenon. These discussions, moreover, have overwhelmingly focused on macro-level processes; a few studies have investigated micro-level processes. Moreover, rarely have these discussions attempted to bring out the interconnectedness between the diverse factors which generate famine in a holistic paradigm. These polarities have tended to obscure the complexity of the phenomenon, and yielded only partial explanations. The present study contributes to the on-going debate by introducing a different approach to explaining and understanding famine, based on a holistic paradigm which takes into account the linkages and interrelationships between the natural and

human-made factors, and between the macro- and micro-level processes in a historical perspective. The main contribution of this study is to argue that famine is a phenomenon which can only be understood in political terms; and as a political phenomenon, there is no simple explanation to famine. The diverse factors which contribute to the development of famine cannot be treated in isolation from one another, but that the totality of these factors needs to be analysed and understood in a broad context. We adopt a broad historical context, which we assume is more appropriate to accommodate the diversity of issues in famine analysis. This approach is here applied to Sudan.

Sudan in the mid-1980s is a place of stark contrasts. On the one hand, lush farm land and abundant crops are a source of great wealth to the commercial farmers who each own thousands of acres. It is a world apart from those parts inhabited by many of the poor. These end up struggling for survival in Sudan's arid wasteland. It is they who fight the losing battle against the natural and political adversaries. Cutting wood provides the sole source of income for many.. Eighty five per cent of Sudan's fuel comes from this source. It increases the possible spread of the desert; for many people, cutting wood provides the only means of earning a living.

Man-made water holes have sustained the herds, but paradoxically, they can help turn pasture into desert. The increase in the usage of land is a very important factor in the process of soil erosion within productive areas.

Many people have abandoned their villages and headed for the towns to find work for a living. On the outskirts of the capital, *Khartoum*, the desert is dotted with make-shift dwellings of people on the move. Families displaced from the rural areas congregate in shanty dwellings around urban centres, living on whatever odd jobs they can find in the city. Some cannot go back to the villages since they have completely lost all assets, and become permanently trapped in the city; eking a precarious and sometimes dangerous life. For some people staying will be temporary, the scramble for food or jobs before returning to their families in the hinterland. For most, though, this is the end of the road. They have little choice, but to begin a relentless search for subsistence on the margins of city life. A fifth of the children in shanty towns are malnourished. The food is composed only of *dura*, there is no vegetables or dairy products. And so their diet lacks essential proteins and vitamins (BBC 1991).

The significance of Sudan's famine is that it happened in a country capable of feeding itself. Famine in Sudan cannot be explained solely in natural terms. A drought can trigger a disaster, it is not the only cause. Sudan's famine is part of a global trend, which suggests that people have become more vulnerable to natural disaster. One reason may

be that as people are made increasingly poor, they have nothing to fall back on, and so the drought is only a stage in the process of emmiseration.

Sudan's agricultural resources are impressive, both in scale and potential. Estimates put arable land in Sudan at 200,000,000 *feddans* of which only 10% are actually utilised. Sudan has an estimated animal population of about 58,000,000 heads. Besides rain water, the Nile and its tributaries provide a perennial source of irrigation for agricultural development. The Nile annual average flow is about 84 milliard cubic meters, of which the 1959 Nile Waters Treaty entitles Egypt to withdraw 48^{c/m} milliard, Sudan is to withdraw 4^{c/m} milliard; leaving the remainder to flow into the Mediterranean. The revised Nile Waters Treaty entitles Sudan to a further 14.5^{c/m} milliard, bringing Sudan's total share from the Nile waters to 18.5^{c/m} milliard (15.0 million acre-feet: USDA 1968). Sudan's potentialities for increased food production are enormous. There is the *Gezira*, two million acres of irrigated farmland, the largest scheme of its kind in the world. But instead of providing the Sudan with a guarantee against hunger, the *Gezira* in recent years seems to have increased the risk. Responsibility lies not just with the Sudanese. Since the *Gezira* began, foreign interests have taken an important role. The project was set up early this century by the British, to provide cotton for the Lancashire mills (see chapter on Sudanese State).

Cotton, the "white gold" on the *Gezira* plain (Gaitskell 1959) was planned to be the country's main crop whose export will finance the whole country's development. But with damaging consequences to the future, the British decided that cotton alone should be the country's main resource of income. At present, stock piles of unsalable cotton is one legacy of their decision. As the world's cotton market has collapsed, so have Sudan's prospects of earning the foreign exchange needed to buy essential imports and pay off its huge overseas debt. Faced with falling cotton prices in the seventies, the Sudanese government decided to grow more food on the *Gezira*. This has to make Sudan self-sufficient, and provide a small surplus for export every year. Sudan increased the area under agriculture by about 2.5 million acres between 1970 and 1975, and there was a major surplus. Sudan had enough food from its domestic sources, could store food for bad years, and then export the surplus (Awad. 1991).

Yet, Sudan's "food-first" policy did not please everybody; least of all its creditors in Washington DC, the International Monetary Fund and its partner the World Bank. Like any bank, the World Bank expects a good rate of return on its investments. The Bank's target in recent years has been ten per cent rate of return on their investments (Ed Shuh of the World Bank 1991). The Bank said Sudan's emphasis on food crops would not produce adequate returns. The Sudan already deep in debt had little option but to turn the Bank's line; to reduce the amount of food it was growing, and return to cotton production (Gurdon 1991). Beginning about 1972, the World Bank became more

insistent in pressing its arguments about Sudan's 'comparative advantage' lying in cotton production for export and against the policies adopted by the government towards diversifying production in the irrigated schemes, including growing more import-substitution elite food crops such as wheat and rice. The World Bank's Third Mechanised Farming Project of 1978 halted Bank loans for further expansion of this type of agriculture. The Bank, nonetheless, offered Sudan a massive 'rehabilitation' package, its largest undertaking in Africa, to rehabilitate the *Gezira* and other cotton-growing irrigation schemes (O'Brien 1986: 198).

The Bank's argument is that it is better for Sudan to promote its comparative advantage in cotton, and to use the proceeds of that crop to buy other needs, including food. Sudan can surely grow more food, but it would be more expensive. The Bank says that Sudan's comparative advantage is to go for the crop which gives the higher productivity and the higher profit and to use that money to support other means of getting food, either boost production elsewhere in Sudan or by buying food from abroad (David Dunn of the World Bank 1991). According to the World Bank, one particular food crop the Sudan would be better off importing than growing itself is wheat. Much of the wheat Sudan currently imports comes from the United States; which is anxious to find overseas markets for its grain surpluses. Some critics say these and other Western interests are the true reasons for the World Bank's insistence that certain food crops should be imported. The Sudanese Minister of Commerce exposes the Bank's line:

Sudan is not even allowed by the World Bank to grow wheat to feed itself. The country used to produce in the *Gezira* about half a million tons every year. Now the country is not allowed to grow wheat at all in these government schemes, and to rely entirely on imported wheat (Awad 1991).

The World Bank denied the charge; saying that its excuse is based simply on which crop brings the best profit. This is refuted by Sudanese former Minister of Commerce:

The Sudan can grow wheat cheaper than importing it. And this was proved by a study, by a consultancy ... which was commissioned to make this study by the World Bank. They show that the costs of production of wheat are lower than the costs of importing it from outside. Nevertheless, the Sudan was required by the World Bank to cut the production of wheat, and to import wheat from the United States and from other countries. At the same time to devote the area which is saved in this to the production of cotton for exportation (Awad 1991).

Enthusiasm for big and expensive projects are among the legacies of British colonial approach to Sudan's development. This was revived in the seventies. Once again foreign investors are the prime movers. The Arab Authority for Agricultural Investment and Development (AAID) wanted to turn Sudan into the bread-basket of the Arab world; a source of food for neighbouring Arab countries. But of the two hundred projects planned, only six survived, and all make a loss. Making Sudan a major agricultural

exporter was the central purpose of ambitious projects such as The Kenana Sugar Scheme; the biggest in the world. It cost 400 million pounds to build, was designed to process twice the capacity of the average sugar plant. The world sugar prices in the 1970s were at an all-time high and Kenana then appeared as an attractive business proposition. But by 1979, when it started production prices had plummeted. Kenana could not compete with other sugar producing countries, and the hoped for export never happened. There have been changing approaches to Sudan's development. These changing development strategies have been mostly disrupted, discontinued or simply abandoned, largely because they reflect changing external influences on the Sudanese state, which for the sake of its own survival, has accepted to implement a catalogue of odd development strategies, which ultimately ended in a complete fiasco.

For most of the Sudanese people, the ambitious agricultural investments of the past seemed to have achieved little. Over 80% of the fertile lands few have benefited from the expensive projects favoured by the former governments, and its foreign backers. The harsh irony is that on the world's largest irrigated farm; the *Gezira*, chronic malnutrition is still a common occurrence. Investment on cotton seemed to have brought little benefits to the people who grow it. Although large scale schemes of export projects have failed to benefit ordinary people in Sudan, the trend continues. In el *Gedarif* area, merchant commercial farmers each owns 50 thousand acres of land to grow only one crop, *dura*; Sudan's staple food. Commercial farmers, millionaires several times over, were closely allied with the merchants who sell the grains both in the domestic market and abroad. A few big merchants are the main monopolists and beneficiaries of the Sudan's grain trade. Because they control the distribution of grains, they can realise a profit per sack a hundred times greater than the small producers, who cannot afford transport and storage. In Western Sudan, each single market is controlled by a cartel of seven to ten merchants. They can fix prices and control those markets for their own profit. Over and above that there are major grain merchants in Sudan, major grain producers, who control the domestic market as a whole and the export market. The small cultivators in fact have no title to the land which they have continued to live on for generations; and so they lose their land easily to big commercial farmers. The small cultivator falls prey to the encroachment of the larger farmers. For many people, the trend towards commercial farming has endangered their traditional safeguards against famine. Reduced their food reserves and taken away their land, it offered them little in return. The more farms are mechanised, the fewer jobs remain. There are other consequences, not least for the land itself. They dispossessed both the pastoralists and settled farmers on those areas, and occupied the land, often illegally. They move on to new land as they are clearing it. And then a process sets in wherein the soil is totally deep-mined, there are no fertilisers used, the crop yield after about three years begins to

crash, and then the land is abandoned. Then it is virtually useless at that stage, and it will take a long time to regenerate. The destruction to Sudan's old-established farming methods, has placed Sudan high on the list of countries vulnerable to famine.

Historically, food was one of the principal sinews of power. Food was, and continues to be power in a most basic, tangible and inescapable form. Food was also fundamental to the structures of dominance and dependency that arose out of this most vital of all commodities. Famine in Sudan, as elsewhere, is a highly political issue, enmeshed in international power and trade relations, domestic politics of the state, access and distribution of resources, of regional polarisation and social differentiation. No rich among the Sudanese have suffered from famine, it is only the poor who suffered. Famine is a crisis in society; it provides the rare opportunity of understanding the power structures in a given society, the structures of dominance and subordination, and the relationship between ruler and ruled. Arnold puts the point succinctly:

Famine can provide a rare glimpse of the lives of the common people; ... Famine opens up to our understanding at least a fragment of the historical experience of subordinate social groups and their interaction with the state and elites (Arnold 1988:3).

This study is about the politics of famine in Sudan in historical perspective.

Chapter 2

Perspectives Explaining Famine

Introduction

This chapter reviews perspectives for explaining famine. It provides a theoretical appraisal of the current debates on the recurrent phenomena of famine in the contemporary world, and how this applies to the context of Sudan. There are five main strands of arguments in this debate. For each of the five theories examined, a brief presentation of each theory is followed by a critique or counter-argument. The inadequacy of any one single theory as frame of reference for the Sudanese context will become evident; a reflection of the complexity of the phenomenon. The complexity of famine calls for a different treatment based on a broad perspective that accommodates the multiplicity of factors which generate famine. Based on such a conviction, a historical broadly holistic approach is adopted to account for the phenomena of recurrent famines in Sudan. Recognising that it is the poor countries in the world, and the poorer segments of society within these countries who suffer from famines, a historical holistic account will allow us to gauge the processes of rural poverty and vulnerability to famine, as well as the continuum of social adaptations to political change and environmental stress. It also brings into focus the contours of the relations of power, as they have evolved in the course of history. How these relations of power have been structured and how they in turn structure socio-economic and political relations between dominant and subordinated social classes, inevitably determine the fortunes of different social groups in the struggle for control over resources, and over entitlements to food. Such an approach marks a departure from the unresolved dichotomies which characterise current debates; those of nature Vs human-agency, of macro Vs micro structures, of internalist Vs externalist explanations, of Food Availability Decline (FAD) Vs Entitlements, etc. Such dichotomies are not only inadequate, but can be misleading. Natural causes such as droughts, for example, can exacerbate environmentally damaging human actions already under way. Conversely, human actions can trigger natural disasters. The complexity is not least compounded by the difficulty of defining what famine really means conceptually.

2- 1- The Definition Debate:

Most attempts to define famine in fact merely describe its commonest causes and effects; and the boundaries between definition, description and explanations are often blurred (Devereux 1993). Some have even questioned the usefulness of defining it (Sen

1981). Nonetheless the debate on the definition of famine has addressed two major issues over which there is much disagreement. The first focuses on whether famine is an event or a process/structure. The second addresses the more complex question of whether famine involves starvation and mass death as a necessary defining condition. Those who see famine as an event couch their argument in the following observations: that famine usually occupies a definite time and space; is typically characterised by exceptional severity in a manner that sets it apart as a singularly salient event, and that in many cases it is accompanied by natural or man-made disasters such as floods, droughts and/or wars. Cutler, a representative of this school, maintains that: "famine is an abnormal event characterised by a breakdown in social relationships giving rise to epidemic starvation and excess mortality (Cutler 1985: 12)

Another group views famine as a process; a phenomenon that develops over a long period of time, and has its roots in the structures of the society. This group contends that famine cannot be singled out and treated as a separate event divorced from its socio-economic, political, and historical contexts. Rather, famine and its devastating effects mark the ultimate final stage of a long process involving social tensions and contradictions of interests. According to this view famine serves as a trigger that sets forth a violent eruption of events. Arnold, expresses this view in the following terms:

famine is rarely a bolt from the blue, a wholly random and unpredictable occurrence that can be meaningfully considered in isolation from economic, social and the political structures of a specific society. ... The proximate causes of a famine (such as natural or man-made disasters); are often no more than the precipitating factors , intensifying or bringing to the fore a society's inner contradictions and inherent weaknesses (Arnold 1988: 7).

Watts shares the same view. In his words:

Famine is a process not an event, it can be about abnormality and collapse, but it also implies extension and intensification. It is defined by disease and mass death, which is terminal and biological. That famines are often long and drawn out of interactive social and biological processes. (Watts, 1991: 10).

Tawney sees famine as the "final stage of a disease which, though not always conspicuous, is ever present" (Tawney cited in Watts, 1991). For this group, famine represents the final stage of the process; its most concrete and tangible manifestation. According to this view, natural disasters act as "precipitating factors" (Arnold 1988); as "trigger events" (Bush 1988b); or as "intensifiers` (Watts 1991). This contrasts with the "event" view which accords natural causes a primary causative function. It is worthwhile noting that the view of famine as a process has the merit of resolving the paradoxical nature of famine as being both event and process. That is because while recognising structural determinants in the genesis of famine, it does not deny its episodic nature, but places this at a terminal stage. It is also revealing to note that there

is a qualitative difference to these views. While the "event" view is basically neutral explaining famine in natural terms, the "processual/structural" view is essentially critical blaming human actions as the main cause of famine.

2- 2- The Debate on Mass Starvation:

Another debate addresses the more complex issue of whether, or not, famine involves mass starvation as a necessary condition. The difference in opinion with regard to the discussion on mass starvation in famine owes its origins to the "Malthusian debate" on the menace of over-population. Writing towards the end of the 18th century, Malthus argued that the earth had limited resources to feed its inhabitants. Moreover, while food supply increased on an arithmetic scale, population increased geometrically. Therefore an inevitable situation of imbalance would arise at a certain point where the ever-increasing population outstripped available food supplies and substantial numbers of people would perish for lack of food (Malthus 1798).

According to Malthus, famine acts as "nature's court of last resort" to hold in balance an otherwise unchecked population growth. Malthus identified two types of checks to keep the optimum balance: "preventive checks", which consist of human means and devices to control population growth. Failure from the part of humanity to adhere to nature's imperatives for effective preventive measures, would result in nature exacting its inexorable laws in the form of "positive checks", such as pestilence and famines. Mass death is therefore a central necessary condition in the Malthusian concept of famine. Many authors have since followed the view that famine involves mass death. Post has expressed this view: "famines cause deaths from starvation and disease which follow the extreme shortage of food" (Post. 1977: X111). Bennet shares the same view when he says that famine occurs when there is "shortage of food so extreme and protracted as to result in widespread persisting hunger ... and a considerable elevation of community death rate attributable at least in part to deaths from starvation (Bennet 1968: 322).

Currey presents the internationally accepted definition; "widespread food shortage leading to a significant regional rise in the death rates" (Currey 1978: 87). John Rivers and his colleagues have stated that "starvation is a semantic prerequisite for the definition of famine" (cited in De Waal, 1990: 10). The FAO definition of famine cautiously evades explicitly stating the condition of death. The FAO definition of famine is "a food situation in which there are clear indications, based on careful and impartial study, that serious catastrophe and suffering will occur if international assistance is not rendered" (cited in Dando, 1980: 62). Sen says that famine is a "particularly virulent form of starvation causing widespread death" (Sen 1981: 40). Many more authors follow the view that high mortality is inseparable from any

definition of famine. The overwhelming agreement in views on this matter suggests that mortality has become central to the definition of famine. This is captured in the standard definitions of famine in English Dictionaries. English Dictionaries define famine as: "a scarcity of food producing hunger and starvation" (Webster's New International Dictionary, 1950: 916).

And yet there is another group who challenge this view. De Waal (1989) dismisses the "most common English sense" of the term as is employed by others as inapplicable to different famine contexts. He argues that this "common sense" term has evolved in a specific historical context from the nineteenth century Malthusian debate. Accordingly, he dismisses the centrality of mass mortality to the concept of famine as being a recent phenomenon in the English intellectual history. In his words:

The central role of mass starvation in the concept of famine is a relatively recent phenomenon. ... the modern English notion of famine is an aberration of intellectual history. The conception of famine as mass starvation unto death was an outcome of the Malthusian debate of the nineteenth century (De Waal 1990: 10).

De Waal argues that the centrality of mass death to the concept of famine is a logical necessity to Malthus's argument. That the constituents of this concept "came not from the experience of famine, but from the logic of Malthus's argument".(Ibid: 17). De Waal concludes that this "erroneous" concept is more "an outcome of social philosophy than of social experience"; and that who defines a situation as one of a famine is an issue of power relations. De Waal goes on to develop his own redefinition of famine based on what he calls the actual experience of famine victims in *DarFur*, of Western Sudan. Here, he argues, the concept acquires strong idiomatic connotations and overtones which make it fundamentally different from the abstracted intellectual European concept. He states that "hunger is in part an idiom; in part it is an experience". And that the meaning for the word "famine" in any society is an outcome of the idioms of famine and hunger used, and the history of actual famines experienced by that society. (Ibid: 13). According to De Waal, famines have different tails; there are those which involve hunger, others involve diseases, others that involve destitution, and others that kill. But questions still remain as to what constitutes famine.

2- 3- Theories of Famine:

The different theories and approaches discussed below reveal a considerable overlap between them, with the inevitable implication of giving different and sometimes conflicting interpretations of famine, as we will see later. The importance of theory to understand the phenomenon of famine stems from considerations for practical policy-making and vital issues which may mean life and death. This necessitates laying out a proper theoretical framework to understand and explain famine; on which understanding

appropriate policies could be made. Five major approaches can be distinguished in the literature on famine. These are: (1) the naturalist thesis, (2) the population thesis, (3) the holistic or interactive approach, and (4 & 5) the Entitlements Approach, and the Food Availability Decline (FAD) Approach.

2- 3- 1- The Naturalist Thesis:

The naturalist argument holds that "natural phenomena" are the prime causes of famine. Natural causes are in fact an amalgam of diverse natural phenomena, including aspects of the physical environment such as climate, drought, rainfall patterns, desertification, and soil erosion. According to the naturalist school, all or some of these aspects are responsible in varying degrees for the creation of a famine.

2- 3- 1- i- Drought:

The intensity and frequency of the Sahelian drought has been a subject of controversy. Rasmusson (1987) points out that the extent of the mid-1980s drought has been exceptionally sweeping, and admits that "the coincidence of drought over such a vast region was the result of complex climatic processes which are inadequately measured, difficult to describe and poorly understood" (Rasmusson 1987: 3). It can be argued that the confusion surrounding the nature of the drought stems from the fact that the phenomenon has until recently sought purely "technical" climatological explanations offered by climatologists. It is only recently that the recognition of the anthropogenic social impact on the ecology and climate has gathered momentum (Redclift 1994, Sage 1994, Glantz 1978, 1987; Watts 1983, 1987, Franke and Chasin 1980; Nicholson 1986; Folland, Parker and Palmer 1985). Nicholson, for example, observes that the recent drought is particularly severe and prolonged. He observes that since the early 1960s a regular downward trend in rainfall over the Sahel is clearly the most severe of the twentieth century. He adds that the processes associated with the downward trend are not clear, but they may be distinct from those associated with the shorter, more intense drought episodes (Nicholson 1986). Recently, attention has been drawn to an apparent relationship with global-scale changes in sea surface temperatures (SST) (Folland, Parker and Palmer 1985) to be the determining force of climatic change and variability.

At a theoretical level, Shukla (1984) argues that climatic variations can be viewed as resulting from two mechanisms: (a) internal atmospheric dynamics and (b) boundary forcing (Shukla 1984). The first set comprises the internal structure of the atmosphere, i.e. wind, temperature and moisture. The second set are associated with complex interactions between the atmosphere and the lower boundary and are influenced in the lower boundary by changes such as SST, snow, soil moisture, albedo (in-coming and

out-going solar radiation) and vegetation cover as it affects the exchange of heat and moisture between the earth's surface and the atmosphere (Rasmusson 1987: 16).

In this complex interchange of processes the human social impact on the ecosystem is unmistakable. As social communities and their activities occupy the lower boundary, they can potentially upset the boundary forcing mechanisms. Excessive farming and deforestation can lead to loss of the vegetation cover, and consequently upset the balance of heat and moisture and between the earth's surface and the atmosphere. Or again, excessive heating can upset albedo balance (the in-coming and reflective radiation) and can thus lead to the phenomenon of "global warming" and the problems of the "greenhouse effect". Many or any of the human practices can have strong impact on the ecosystem.

Mattsson identifies four geophysical correlations to the drought. First, a correlation between sea-surface temperatures south of the Equator and monsoonal rainfall in the Sahel. It has been discerned that high summer temperatures in these waters are apparently related to the Sahelian drought. Second, It seems that some oceanographic atmospheric circulation (the so-called El Nino) are in some way connected with the Sahelian drought in 1984. Third, It seems that several long-lasting episodes of decreased salt concentrations in the upper layers of the North Atlantic Ocean have during the last 14 thousand years coincided with periods of drought in the Sahel; and fourth, It has been suggested that deforestation in the Congo River basin in recent decades has contributed to the droughts that have occurred in the Sahel since 1968 (Mattsson 1991: 174-5).

Rising Sea-Surface temperatures which is associated with global warming remains a strong probability for the drought. Global warming is a phenomenon of far remote origins which affects local climatic and production systems.

The predominance of fossil fuel combustion is the primary cause of global warming. The concentrations of radiate gases emanating from fossil fuel burning: i.e. carbon dioxide (CO₂), methane (H₄), chlorofluorocarbons (CFCs), low-level ozone (O₃), and nitrous oxide (N₂O) are predominantly the prime causes of global warming and are collectively called the "greenhouse gases" (Hulme 1990). However, as Redclift has argued, increasingly environmental problems are looked upon as scientific problems, amenable to scientific "answers". An example is the way global warming is treated.

Since global warming is a "scientific" problem, it is assumed that it must have a scientific solution. The "greenhouse effect" is viewed as carrying social and economic implications, but scarcely as an "effect", in that the human behaviour which underlies global warming is rarely considered (Redclift 1994: 30).

The mechanisms of how global warming affects the global climate are complex. The gases are known as greenhouse gases because they are transparent to incoming short-

wave radiation. Their effect is to trap heat in the lower layers of the atmosphere thus causing surface air temperatures to rise. This phenomenon is known as the greenhouse effect and threatens to alter the global climatic environment to conditions never before experienced by the human species (Hulme 1990: 4; 1991, 1992; Gleick 1989; Romanthan 1988; Warrick and Jones 1988; WMO 1988)). The implications for precipitation in the Sahel is that "at least in the case of the African Sahel a plausible mechanism for linking decreased precipitation and warmer oceans has been established" (Ibid 1990: 7). The economic consequences of contemporary climatic variability are generally regarded as more severe in less developed countries than in developed ones. This is because of the negative feedback effects on the climate system and on water resources, agricultural and food systems, energy sources and the general ecosystems. The discussion on drought has to be put in a wider global political/ecological perspective that brings out the relationship between the social organisation and the physical environment. Redclift identifies the root of the problem to be the expansion of economic growth, and argues that

economic growth clearly poses problems for the biological and climatic systems which are indispensable to our survival. The "laws" which govern the workings of nature, ... involve the conversion of one form of energy into another. The natural capital of the globe is transformed, through economic growth, in ways which modify such processes (Redclift and Sage 1994: 2).

And that:

by concentrating investment of surplus value in order to maximise the accumulation of industrial capital, we have tended to neglect natural capital (environmental goods and services). Instead we have focused our support on the development of human capital ... and wasteful resource uses (Ibid: 31).

This entails an examination of the social/ecological relationship and the effects of human practices on the environment, the resultant ecological changes and in turn the social readjustments to the new changes. In this sense the social system and the environmental system are to be seen in a state of dynamic flux of change and readjustment (Anderson and Johnson 1988). The human variable is a critical factor in the ecological equation which needs to be harnessed as far as resource utilisation is concerned for vital future sustainability of international resources.

2-3-1-ii- Drought: A Reassessment:

The on-going debate on the nature of the drought has polarised in broad terms on two lines of argument: the first sees drought in technical terms as a natural phenomenon, and that it is part of the semi-arid climate. The second argument as we have already indicated sees drought in critical political terms as a man-made phenomenon. This view

of the drought points to the responsibility of both individuals and states to have adopted ecologically damaging farming and stocking practices, and misguided development policies as well as the functioning of a distorted market system. This view invokes a notion of drought as an "environmental problem"; a product of people's relationship with 'nature' (Redclift and Sage 1994).

Climatologists and scientists point out that explanation of recent droughts in absolute natural terms is certainly inadequate. Most scientists agree that changes in climate are not responsible for the vast areas of semi-arid land going out of production each year. Horowitz and Little (1987) observe that low rainfall, even over an extended period, does not alone affect the biological viability of a habitat. The evidence seems to suggest that human misuse of the environment lies at the root of the environmental problem. But recent droughts are different from natural climatic stresses to which people have long learnt to cope with. Recent droughts are exceptional and different in character from past ones in terms of their persistence, their severity, intensity, and their geographical sweep. The prolonged drought over the Sudan/Sahel zone from the 1970s through the 1990s is an exceptionally long one which has a 1 in 125000 probability of occurrence (Winstanley 1985). People's responses are adapted to cope with short-term stresses spanning between 2-6 years (Nicholson 1986, Rasmusson 1987) which are part of the semi-arid climate. Many past droughts were localised occurrences; the affected communities could escape the stricken area by moving to unaffected neighbouring areas. Such long-established local-level movements attest to the fact that droughts in the past were not so pervasive. It is difficult to find in the past history of the region an instance of drought where all communities had been simultaneously devastated, except possibly more than 5000 years ago when a period of prolonged drying up followed the wetter Holocene period. Gowlett testifies to this by recourse to archaeological evidence:

Between 5000 and 4500 BP (3800-3100 BC) the sudden onset of much more arid conditions, which are reflected in marked falls in lake levels, ... by shoals of dead fish found in former lake beds, an indication of very rapid drops in water levels. Human occupation in the Northern belt must have been hit as hard or even harder as populations affected by the famine of recent years (Gowlett 1988: 38-9).

From the evidence above, recent droughts in the Sahel zone need to be understood in a different perspective; one which gives prominence to the role of human actions.

2-3-1- iii- Critique of the Naturalist Thesis

A major departure from the mainstream naturalist thesis is the more popular view which focuses on human-agency to explain the occurrence of droughts and famines. Proponents of this view present two major arguments: that

- 1- famines do not necessarily follow from droughts; and;
- 2- that droughts themselves originate from human actions.

Many authors have explained why droughts need not result in famines and famines do not necessarily have their origins in droughts. (Sen 1981; Watts 1983; Bush, 1988; Torry 1984, Arnold 1988). In his studies on the Bengali and the Ethiopian famines, Sen has shown that there had been no real shortage in the amount of rainfall, nor had there been any significant reduction in the volume of food output. The occurrence of famine in these contexts discredits the argument that famine is primarily caused by drought. Drought cannot be explained in terms of rainfall. An aspect of rainfall patterns is what is called the "spatial variability of rainfall". This means that there may not be a real shortage in the overall amount of rainfall, but that the rains are unevenly distributed across geographic space; such that some areas receive insufficient share of rains required for the normal growth of crops (Glantz 1987). Glantz also distinguishes between three types of droughts; meteorological, hydrological, and agricultural droughts. Meteorological drought can be defined as "a 25% reduction of the long term average rainfall in a given region ". Hydrologic drought " has been defined as one in which stream flow falls below some predetermined level". Agricultural drought occurs when there is not enough moisture available at the right time for the growth and development of crops. Glantz stressed the importance of the timing of precipitation at crucial phases in the development of crops. This is because different crops have varying degrees of moisture requirements at different phases of growth. He observes that drought must be defined in terms of the water requirements of specific crops; and concludes that reductions in rainfall do not "necessarily translate into reduced agricultural production"; and that "there is no simple correlation between meteorological drought and declines in agricultural output" (Glantz 1987: 39,47). Some studies have emphasised the importance of nitrogen and phosphorus nutrients rather than rainfall for plant and range growth (Djiteye 1982; Bremen & De Wit 1983). This evidence warns against generalisations about drought and rainfall variables as the main causes of ecological degradation.

The second argument of the anti-naturalist thesis emphasises the role of human actions in the creation of droughts. MacLeod, for example, argues that the main cause of drought is dust. As dust increases in the outer layers of the atmosphere less thermal heat reaches the earth's surface, and consequently "cold spots" are created. Cold spots hold low moisture content, and produce droughts. The process starts in this way: The presence of grass cover fixes iron and other chemicals to the ground and consequently keeps the soil intact. Removal or destruction of the grass cover "would lead to the establishment of temperature bands of abnormally high differences from one to the other. These bands in turn would bring on air turbulence or localised wind currents. Once the grass cover has been lost, nothing holds the soil in place, and these wind currents catch up the loosened soils and carry them upward into the atmosphere where

they become the dust that inhibits the sunlight and brings on the drought (MacLeod 1976: 220-22). As Richard Franke rightly observes, it is not so much the drought that destroys the land, but the destroyed land that brings on the drought. The critical issue here is how the land comes to lose its vegetative protective cover MacLeod's theory points to human actions to be responsible for the destruction of the grass cover, and the resultant drought. Human practice in excessive extractive farming, insensitive use of marginal lands and fragile ecologies, overstocking, are all part of the misguided human actions which have combined to produce environmental problems. The most recent explanation of the causes of drought has been found to be related to global warming and the "Greenhouse Effect". Countries in the North contributed much more to carbon emissions on a per capita basis, since they consumed more of these resources (Redclift and Sage 1994; Agwaral and Narain 1991).

2- 3- 2- The Population Thesis:

The population thesis has been advanced as another theory of famine causation. The population arguments date back to the Malthusian debate at the beginning of the nineteenth century (see section on Mass Starvation earlier in this chapter). A contemporary version of the old Malthusian concept holds that due to modern medical advances, large numbers of humanity have been spared from the scourge of diseases and epidemics, thus eliminating one of nature's most potent "positive checks", unleashing famines to take their toll to trim populations to sustainable proportions. This modern version has come to be known as the "Neo-Malthusianism". Ehrlich, for example, declares in the "Population Bomb" with such fatalistic finality that "the battle to feed all of humanity is over ... hundreds of millions of people are going to starve to death before this decade is out" (Ehrlich, cited in Franke: 1980). Many authors have pointed to the links between population, overstocking and desertification. Ferguson, for example, postulates that:

overstocking and the lack of managed grazing patterns in the Sahel, are the most important causes of desertification in the region and that desertification is a symptom of more fundamental problems of rapid population growth and ... land management and conservation techniques. (Ferguson 1977:.7).

Ibrahim voiced similar worries about the impact of population on the ecosystem:

shifting cultivation turned into land misuse, and a chain of processes of deterioration of land productivity was begun: population increase led to excessive cultivation, which, in turn, led to enhanced soil erosion and soil impoverishment. This resulted in the decrease of millet yields ... To make amends, population which is constantly increasing at an annual rate of 2.5%, had to increase the area cultivated with millet ... this expansion of cultivation meant a fresh wave of desertification (Ibrahim 1984: 110-18)..

Ibrahim places population growth at the onset of a complex chain of concatenated processes of land mis-management, declining yields, overcultivation of fragile lands, led to soil erosion and ultimately desertification. But, for Ibrahim, population growth marks the onset for the whole process.

2- 3- 2- i- *The Tragedy of the Commons:*

This is the debate about the mismanagement of the communal lands, which forms a variant of the population thesis. Garret Hardin in a 1968 article proposes that "rising populations render the common use of common resources no longer possible without serious environmental damage". The problem resides in a contradiction in ownership between private and public property. That rangelands are "communally " owned; public property, whereas herds are privately owned. Individual actions to increase private benefits from the use of the common resource conflict with the common interests of the group in the long run. Thus while the individual user gains the full benefits of any such increase, the entire community must suffer the consequence of the decline in overall resources. According to Hardin, contradiction is not evident until a certain population density is reached The "tragedy of the commons" is also a population theory (Hardin 1968). The tragedy of the commons argument has implications for other contentious issues such as overgrazing and land carrying capacity. As Horowitz and Little observe:

Since each herd owner seeks to maximise his numbers of animals, charge rapidly exceeds carrying capacity of the range. At first the effect may be contained within the herd itself, ... But soon the costs are transferred to the range in the form of overgrazing, erosion, declining biological productivity and desertification. It is a persuasive scenario . Yet it is vulnerable at a number of points(Horowitz and Little 1987: 66-7).

This last comment indicates the shortcomings of the hypothesis as a comprehensive explanation for the environmental crisis in the Sahel. Evidence has been mounted against the population thesis in general and the tragedy of the commons in particular. The following is a critique of the population thesis as a way of explaining famine..

2- 3- 2- ii- *Critique of the Population Thesis:*

Recent studies have emphasised the importance of levels of consumption, rather than the numerical force of population on global resources. These studies have shown that although the population number in poor countries is far greater than in the rich countries, the key issue is that it is the populations in the rich countries who consume by far the overwhelming share of global resources. For notwithstanding projected figures from UN sources that 90% of the expected 4.7 billion people who will be added to world population by 2050 will be born in the South, it is the industrialised countries that currently present the biggest threat to global environment resources. Despite supporting only 24% of the world's population, the industrialised countries consume 85% of the

world's metals, 92% of its cars, 85% of its chemicals, 81% of its paper, 78% of sawn wood, 72% of milk, and 48% of cereals. They also consume 82% of gasoline, 72% of diesel, 85% of gas, and 82% of electricity (Sage 1994; Parikh 1992). In 1965 the high-income countries enjoyed 70% of the global GDP, while the South took 19%. By 1989 the 16% of the world's population living in the North accounted for 73% of global GDP, while the 78% living in the South received less than 16% (Sage 1994, Harrison 1992).

One of the weak points in the population theory is that it treats people as masses of passive objects who need to be fed and cared for. It seldom views population positively as an active agent capable of effecting positive transformations in their environment and living conditions. Franke put this point succinctly. He is worth quoting at some length:

It is assumed by population theorists, ... even though rarely stated - that people are primarily mouths and stomachs to be fed. That they are also hands to work and minds to think and create is rarely mentioned. The people of the Sahel ... were also producing more from the land and for outside markets as well as for themselves. ... larger and more dense populations would have had more human resources to put to work in both relief efforts and efforts to salvage the environment and begin the process of reconstruction. That people were not put to work at these tasks can hardly be a by-product of their numbers per se. ... we can highlight the logical difficulties of assuming that population growth was a major cause. It is just as logical to assume that population growth should have been a major cause of overcoming droughts (Franke 1980: 114).

Franke and others argue that it is no less logical to view population positively as a dynamic force of change. As another expert has commented on the inappropriacy of aid rehabilitation and development programmes in the Sahel, that these programmes would be better advised to provide the Sahelian with a spade than a spoon. What Sahelians need is to enable them to work for themselves, and give them the opportunity to go into useful productive activity.

Another more powerful counter argument to the population theory is the one that recognises the potential for agricultural growth (Boserup 1965; 1981, Simon 1981; George 1976, Gribben 1979). Critics have pointed to the great potential and elasticity of agriculture. The potential for agricultural growth is overwhelmingly capable of carrying infinitely greater population densities than those prevailing at present. In this connection agricultural growth can receive added impetus from increased population numbers in terms of labour force and for providing extensive market bases for agricultural production. Population growth, rather than being an instance of alarm, should be welcomed as reason for optimism.

Boserup is one of the prominent advocates of this view. In her book *The Conditions for Agricultural Growth*, Boserup has presented a powerful argument against the population theorists. She has pointed out how agriculture has consistently expanded and adapted to meet the needs of ever-increasing population numbers. That the great advances that have taken place in recent history in the reach of productive means have

indeed transformed agriculture from subsistence into almost a limitless source. Increased production has been made possible through a variety of means: intensive, multiple, and cross-farming techniques, coupled with technical innovations in mechanisation, irrigation and fertilisation have all been part of the process towards abundant food production. Boserup argues that the resourcefulness and adaptability of agriculture is not a matter of random choice, but arose from the necessities involved in the demands exerted by demographic pressure.

An elastic "carrying capacity" of agriculture has been recognised by different authors. Dando, for example, estimated the earth's carrying capacity to be ten to twelve times its present; of about six billion people. This he attributed mainly to the dynamic nature of agriculture and to the positive experiences of developing countries (Dando 1980: 90). On another estimate, the world's carrying capacity is calculated to be five times the present charge, (if livestock were not fed a diet that could be used by man). Another estimate suggests that the world's agriculture has the potential to feed as many as 67 billion inhabitants; 17 times as presently alive. If, for example, the arable lands in the whole planet were cultivated as efficiently as farms in Holland. The FAO estimated that the total arable land in developing countries presently stands at 740 million hectares, out of which only 93 million are currently under irrigation .

Population theorists deplore the high birth rates in many poor areas of the world where hunger is endemic. This view has also been disqualified in many ways. Bush, for example, points to the important fact that in these areas child mortality rates are also the highest in the world (Bush 1988). This is to say that high birth rates are counter-balanced by equally high mortality rates. General mortality rates are also the highest; as also life expectancy is the lowest in the world, ranging between 40 and 50 years. Taking account of high child mortality rates, general mortality rates and low life expectancy, the technical 2.7% birth rate in Africa and in the Sahel probably does not exceed normal world averages, and cannot add significantly to an increased population numbers in the region.

Studies have been conducted to explain the propensity of the poor to have larger families. Mamdani and White carried out studies on poor Punjabi and Javian households respectively, concluded that the tendency among the poor to have larger families has been motivated by the demand for child labour as a response to economic necessity. Child labour contributes to family income. Accordingly, poor villagers consciously perceive of their children as labour assets. Franke explains that this phenomenon has "been created by the particular needs of the colonial system of profit-making, which in turn is perpetuated by the class structure and land problems that the system has produced or enhanced". (Franke, 1980: 115).

The "tragedy of the commons", has in turn been attacked along the following lines: First, there is no evidence to suggest that private ranges are better managed than public ones. Sanford (1983) notes that "overstocking and environmental deterioration appear to be just as common and serious in areas of rangeland where, as in parts of the USA and Australia, both land and livestock are individually owned". Pastoral communities have their own moral codes and restrictive rules governing access to and use of communal ranges. Horowitz and Little ascribe the general malaise of the Sahel to the departure from these traditional "egalitarian norms". The transition from more egalitarian to more differentiated communities is clearly associated with a decline to a commitment to general morality (Tausing 1980). But this transition is normally accompanied by the very privatisation of public resources.

The notion of overgrazing, so central to discussions of desertification and rangelands, has given rise to three different representations. (1) Excess charge is being removed by death or sale and the balance is being constantly restored between charge and carrying capacity. This is represented by an "equilibrium model". (2) The capacity of land to sustain excess weight deteriorates and is being permanently damaged. This is represented by a "degradation model". (3) Stocking rate and carrying capacity are in some kind of association, such that temporary increases in load cause short-term declines in the carrying capacity, but that capacity is restored over time as the charge pressure is reduced. This is illustrated by a "resiliency model" (Horowitz and Little 1984: 68). Writers of the structural school tend to favour the equilibrium model. British and American scientists have historically been associated with the degradation model, and one which is most commonly invoked in official documents. Researchers who have extensive field studies find the resiliency model to accord better with the empirical situation (Horowitz and Little 1987).

Many studies have documented the complex co-adaptive mechanisms between the human, animal, and plant species in an eco-system. These studies have pointed out that pressure exerted on plants by selective grazing of animals, leads to these plants evolving certain genetic characteristics which enable them survive the pressure (Lewin 1985; Nyerges 1982; Scott 1984; Conant 1982). The ecological balance of an ecosystem to remain in a state of equilibrium entails a beneficial interaction and co-adaptation between species; such that as both humans and animals benefit from plants, so plants benefit from the human and animal species. This implies that removal of one or another constituent member to the equation may adversely upset the whole balance. This is what Conant (1982) has documented in a study on the effects on the eco-system by the removal of a local community in Eastern Africa. Conant found that the removal of humans and animals from the locality has led to the phenomenon of what he called the "green desertification". By this he refers to the colonisation of the locality by several

varieties of one plant species; namely acacia, "which have almost completely taken over a traditional grazing area known as Simbol on the Masol plains of North-western Kenya" (Conant 1982); and asserts that: "not only is traditional pastoralism an integral component of the eco-system, but that removal of it can in some cases lead to results that are more unpredictable than the effects of overgrazing already diagnosed as incipient desertification (Ibid 111).

Sandford even reverses the logic of the overgrazing and the land carrying capacity arguments. He maintains that since ranges depend on rainfall, the volume and density of range varies considerably from year to year in accordance with the variability of rainfall. Accordingly, in most years, the range could sustain far more animals than actually utilise it. Sandford refers to this as "under stocking"; and asks, over the long-term, which strategy is commercially sounder; one that habitually overstocks or one that habitually understocks (Sandford 1982). An ecology team conducting a study in Niger, discovered that moderate grazing provided for greater residual moisture- i.e. a soil moisture reserve. This had the regenerative effects of extending the green feed period for animals and increasing perennial regrowth. The team also found that many pastures were actually under-utilised (Horowitz and Little 1987: 70). Some studies suggest that overgrazing even improves pasture through an evolutionary process imposed on plant species by animals' selective grazing (Lewin 1985: 567). These findings seem to suggest that the population thesis, and the other associated arguments of overgrazing are inadequate in explaining recurrent famines. Or at least they give the suggestion that population would need to be put in a different perspective - one in which people are viewed positively as active agents, interacting with and transforming the political, socio-economic, and the physical conditions of their environment.

2- 3- 3- The Holistic or Interactive Approach:

This approach encompasses diverse factors; internal, external as well as historical ones. That these factors interact with one another in a way that makes them inextricably linked and inseparable for analytical purposes. Internalist analyses focus attention on the specific internal situations in given African or third world states which are thought to be directly responsible for the creation of poverty and hunger. Such internal determinants include diverse influences such as economic and development policies which foster and maintain inequalities and class formation, biased agricultural policies favouring cash crops and against the peasantry, and political structures characterised by dominance and control over and insensitivity to the interests of the vast majority of the rural populations. Almost all of which are invariably dominant features of internal African politics. Cummings lists a number of internal factors which, he suggests generate

famine. These include: inefficient development of human resources, continued maintenance of inherited colonial institutions and structures, the existence of many small economies, negative trends in food production, poverty, high population growth rates, increased dependence on food imports, and violation of the delicate balance between environmental realities and the necessity of agricultural development (Cummings 1987: 112).

Externalist explanations, on the other hand, depict as issues of primary concern, the impact of colonialism on the past and future prospects of African states. How in a given historical context, colonialism has underdeveloped Africa. That it had created modes of production congruent with the interests of the colonial powers and incompatible with African needs. Externalist explanations also focus on the precarious position which Africa as a whole is allowed to occupy in the world economy and the nature of the world capitalist system which uses Africa as a domain of extraction of cheap resources. The character of international trade, the growing power of agribusiness and the emergence of a new pattern of an international grain trade, the debt crisis, and the energy shocks are all themes which figure out prominently in the externalist arguments.

2- 3- 3- i- Indigenous Survival Strategies:

One of the most powerful themes in the holistic approach is the argument that peoples who live in precarious environments adapt to their environments in a variety of ways. Scores of research studies in the Sahel have accumulated evidence to suggest that Sahelian peoples have managed through the ages to synchronise their way of life to the vagaries of their environment through various forms of adaptive mechanisms and survival strategies. These mechanisms have for a long time enabled maintenance and reproduction of the system on fairly stable bases. It is only at certain historical junctures, through the inroads of colonialism and capitalist penetration that these survival systems have been frustrated and weakened. Prothero, for example, argues that: "[I]n physical conditions which are in all respects marginal, the relationship between people and land in cultivated or pastoral economies or some combination of the two, are very finely adjusted and delicately balanced" (Prothero 1974: 163). Herders and farmers have long lived a life of complementarity of needs and exchange of resources; a form of symbiotic co-existence. They also have a thorough knowledge about their environment. Scott, points out that: "herders and farmers are extremely knowledgeable about their environment. Farmers for example, distinguished micro-environments, several species of certain grains that they in turn associated with particular micro environments" (Scott 1984: 3). Farmers have plant indicators to judge the conditions of soils. Selected plants were also grown to stave off the inevitable hunger period (Haswell 1953: cited in Scott, 1984: 4).

In his most extensive study of Hausa communities in West Africa, Watts describes their adaptability that they "were in some sense geared to environmental risk, and possessed some sort of adaptive flexibility and adjustment capability with respect to drought and oscillations in the availability of food" (Watts 1987: 127). Quoting Raynault, describing 19th century Hausaland adjustment patterns, adds that these mechanisms included individual as well as collective practices which permitted the rural community,...

a margin of security ... traditional techniques of storage permitted grain to be stored for relatively long periods ... which made possible the constitution of reserves ... after the harvest the seed destined to be planted the next year as well as the quantity of grain necessary for the subsistence of the group during the planting season were stored by the clan head in a large granary which could not be opened until after the first rain (Raynault 1975, cited in Watts 1987:127).

Bush, in his study of famine in Western Sudan, attends to one of the most important adjustment strategies of these communities, namely; migration. Bush sees migration not merely as a seasonal contingency to be relinquished when conditions improve, but that it has become a real "lifeline" for many households. Not that it is a "retrenchment" strategy as De Wall suggests, but has become "transformatory". He argues: that "it was the combination of cultivation and cash income from local or migrant labour that proved to be the lifeline for most villagers ... it has become transformatory to the livelihoods of many" (Bush 1988a: 18). Herders also employ different strategies to cope with the vicissitudes of their environment. One such strategy is to maximise the size of herds. Swift, for example, points out that "the size of one's herd is a hedge against bad years" (Swift 1973: 74). This was associated with good husbandry and productivity. Other strategies include herd diversification (Ibid); long distance migration in search of pasture and water (Stenning 1959); a complex network of sharing of gifts or loans among kinsmen - what has become known as the "logic of the gift" (Stenning 1959; Swift 1973). But the most effective "risk minimising" strategy has proven to be "holding the maximum number of productive animals in the face of heavy loss" (Baker 1974).

Earl Scott has suggested that the adaptive flexibility of pre-capitalist communities was organised around the problem of risk aversion and a guaranteeing of a "margin of security" to their members. They have evolved a "subsistence ethic"; i.e. a form of a moral economy - which in essence was a system of co-operation, complementation and communal sharing. It is also based on age-long evolved folk knowledge about local agronomy; e.g. locally adapted cereal varieties, a preference for the consumable versus the marketable, inter-cropping strategies, knowledge of the local botany so that wild resources could be exploited when necessary (Watts 1987: 29-30). Scott further developed a socio-ecological approach - what he calls "the Human Ecological

Approach". In essence, the human ecological approach makes the human being an organic part of their physical environment. He defines the boundaries of his approach:

The Human Ecological Approach allows us to perceive man as a human organism in nature interacting with other species of organisms (i.e. the nature of the interrelationships between living organisms and their physical and biotic environment) (Scott 1984: 50).

It assumes a symbiotic co-existence between organisms - the principle of a balance of nature - the tendency of the organic community toward homeostasis within the limitations of its living space. In such a co-operative co-existence "the probability of the survival of the individual living things or of populations increases with the degree with which they harmoniously adjust themselves to each other and to their environment" (Allee et al 1949, cited in Scott: 50). Such refined orchestration of the human being to their environment has been an age-long feature of rural communities. However, externalist explanations ascribe the weakening of these mechanisms to the advent of colonialism and the adverse impact of capitalism which have transformed the traditional systems to serve external interests rather than the security needs of local communities.

2- 3- 3- ii- Colonialism and the Roots of the Agrarian Problem

Many authors have pointed to the debilitating effects of the colonial legacy as it has continued to plague African states. Glantz (1987) attributes the problems of hunger in many African states to poverty, the seeds of which lie in the continent's colonial past and in unwise policy choices made in the early days of independence by national governments and external aid donors. Glantz describes what he calls the "considerable colonial baggage" which continued to burden African states. He lists a catalogue of problems as legacies from the colonial rule: "unsettled frontiers, highly dependent market-economies keyed to the export of commodities of interest to the metropolitan powers, neglected food production systems and imitative life-styles and institutions". The cumulative impact has been the biases in African social and economic systems favouring modern/urban sectors over natural/rural systems, the former dominating political choices before as well as after independence (Glantz 1987: xiv). This bias is nowhere more evident than in agricultural development policies which invariably encouraged cash crop production to be exported to the colonial metropolitan markets, and neglected food production. These biases entailed that by the time of independence the new emerging ruling elites had high political and economic stakes to guard through perpetuating the inherited structures and institutions and by tying up the continent's productive means to the demands of outside markets. This has led to agricultural development policies having in common the following salient features (a) favouring of cash-crops at the expense of stable food production, (b) low prices offered to

agricultural producers, (c) low wages for agricultural labour, (d) government control over pricing and marketing.

Policies oriented towards cash-crop production have in fact been consistently motivated by short-term political expediencies than by the imperatives of economic and social development. The cumulative effects of these policies have been discouraging to food production and increasing the vulnerability of the rural communities who depend on agriculture. Agriculture has become a source of extraction to generate the foreign exchange needed to expend elsewhere in the economy. One such sector which claims a substantial share of the hard-won foreign exchange is industry. Lofchie observes that "agriculture came to be treated as an object of economic extraction, an almost infinitely elastic source of tax revenue for state expansion and finance capital for enormously expensive industrial projects (Lofchie 1987: 91).

The bias in favour of cash-crops in African agriculture and the neglect of food production has resulted in a rapidly declining per capita agricultural production and huge food deficits. The FAO estimated that countries affected by food shortages would need as much as 7.0 million tons of food during 1984-85. To make up for these deficits required the import of massive quantities of food to be purchased in the international market. Consequently this has posed immense strains on the meagre foreign exchange resources. Nowhere is this bias so bitterly felt than in situations where export crops are flowing out while people are dying of hunger. This is what is called "Africa's agrarian paradox" (Bates 1986, 1981; Commins 1986; Lofchie 1975), in which "a continent unable to produce sufficient food to provide the majority of its citizens with even a barely minimal diet has been able to record sharp increases in its annual production of agricultural goods destined for external markets (Lofchie 1975:554). Cash crops are considered so important that the export of such crops continued or increased during the droughts and famines in the Sahel and Ethiopia during the 1970s and 1980s while the production of food crops declined sharply (Lofchie 1984). But why do African states follow such policies biased against food and exposing the vast majority of the rural communities to the risks of hunger and famine. Glantz locates the underlying causes of the continued emphasis on cash crop production in the colonial legacy, which has come in contemporary world politics to be explained in terms of comparative advantage and the harsh realities of the international market. "A legacy of the colonial economy, this bias is now explained by reference to comparative advantage and to the harsh realities of international markets, which do little to encourage the diversification of traditional trade patterns by weak participants" (Glantz 1987: xvi). Raikes explains the theoretical economic bases of the comparative advantage of cash crop export-led-growth strategy, and points out the limitations of the comparative advantage theory. He says:

The argument is that the foreign exchange earned from export-crop production would buy more (imported) food than could be produced locally with the same resources. Alternatively,... that it is preferable to concentrate on export crops when prices are such that more food could be imported from their export proceeds than could be grown with the same land, labour and inputs. So far as it goes, this is a perfectly reasonable economic argument. Other things being equal,... (Raikes 1988: 8).

Most critical of all, however, is the unequal nature of income distribution. Encouraging export crops may imply concentrating on the already richer regions of a country. It may precipitate a land-grab in which the rich and politically influential dispossess the powerless. Men may increase their cash income and expenditure while women and children lose part of their previous food supply. Mechanisation may reduce labour requirements and thus wage income. High-risk innovations can lead to losses or debt (Raikes 1988). The issue of prime concern here is whether the strategy meets its stated goals of committing the foreign exchange earned to import food, and whether that contributes to increased food security or vulnerability of the rural communities. Government commitment to cash crop production assumes that cash earnings would be utilised to purchase food to offset shortfalls. It has become evident, however, that there is no guarantee that this will be the case. There are reasons for doubt:

There are strong reasons, however, for doubting whether poor people's access to food is likely to be improved by increased emphasis on export-crop production. Just because the foreign exchange from export crops could pay for food imports, does not necessarily mean that it will do so. There is no reason to suppose any relationship between the two. Nor is there any assurance that if food is imported, it will be destined for, or suitable to, those most in need - or priced and distributed to allow them access to it (Raikes 1988: 9)

Comparative advantage of export crops production is assumed to generate foreign reserves to facilitate and indeed lead growth. This strategy of export-led-growth is justified, Glantz argues, by African leaders and their foreign advisers and financiers as the short-cut to build an industrial base on modern lines. But the effects of such a strategy have been the emergence of a growing urban labour force demanding of cheap food, health and education services and other urban needs. Food has to be subsidised for the growing urban populations. All of these demands have exerted increasing pressure for the generation of more foreign exchange which in effect meant further expansion in cash crop production. As a result more and more land came under cash crop cultivation. Governments resorted to marketing and pricing controls, and introduced policies that have been designed in ways that induce farmers to grow more cash crops by offering better prices for cash crops vis-à-vis food staples. This has resulted in a general mood of neglect of food production manifested in contraction of the area committed to food crops. Government pricing policies offer low producer prices, the bulk of the profit being appropriated by exporters and government parastatals, such as The Oilseeds Company, the Gum Arabic Corporation and The Livestock and Meat Marketing Corporation, which have become common practice in

most African states, turned into a means of accumulation for members of the emerging ruling classes. Glantz gives the following example from Niger:

The cereals shortfall is supposed to be recouped by earnings from groundnuts sales. The marketing of groundnuts, however, was monopolised by a government corporation - which along with a class of large traders, appropriated the bulk of the earnings with little benefit to the small-scale growers (Glantz 1987: 63).

The low returns from cash crop proceeds, coupled with the neglect of staple food production, diversion of foreign exchange earnings to other sectors and to unsuitable urban-targeted elite food imports, have had negative consequences on rural food production systems. Besides creating conditions of dearth and high food prices, they have culminated in a secular disorientation of rural agriculture, weakening of traditional survival systems and mass-scale dislocation of rural communities through migration. The old traditional systems can no longer reproduce themselves. Able men are forced to migrate to urban centres in search of wage labour to make remittances back home. This in turn adds to the already alarming rate of urban growth estimated at between 5 to 7 per cent in African cities. A US report states that "immigrants to African cities often come from impoverished rural areas and their movements add to the destabilizing effects of rapid urbanisation" (USOTA, 1984).

In the short-term, migration does indeed provide an invaluable means of livelihood for members of households who stay behind and receive remittances from migrant members. In the long-term, however, it shifts the responsibility of bread-winning within households from a shared family undertaking (as it used to be in the past) to individual members especially women. In this way migration may render households more vulnerable in the long-term as they become increasingly dependent on remittances subject to the highly precarious conditions of the wage labour market. On the environmental sphere, moreover, the effects of cash cropping are no less devastating. Faced with the adversities of low cash returns for their products vis-à-vis increasing demands for consumer goods coupled with high food prices, farmers are forced to cultivate more and more lands in quest for bigger output. This has meant the extension of cultivation into marginal zones, thereby precipitating ecological deterioration creating the conditions of drought. Bush traces the roots of the problem to colonialism which ...

disrupted an indigenous relationship ... Colonialism altered the pace and nature of local recovery from drought. This is because European demand for the monetisation of local relationships and its use of the most fertile lands dislocated local food systems making African countries more prone to drought (Bush 1988: 6).

Arnold shares the same view with Bush and others. For him the exogenous influences of imperialism and the international economic system have seriously undermined Africans' ability to control and manage their productive resources, saying:

Through the inroads of colonialism and an international economy dominated by Western capitalism, Africans have seemingly lost the capacity to control their productive forces and to manage the environment in accordance with their own needs and past experience (Arnold 1988: 33).

The final message that these authors convey is that under the exogenous forces of colonialism and an inhospitable international economic environment, African traditional systems of survival have been systematically weakened. They have been made to lose their in-built adaptive capacities.

2- 3- 3- iii- Debt and International Trade:

The strategy of cash-crop-led economic growth, as has been argued, ultimately initiated a chain reaction of social and ecological degeneration. The decline of staple food production has meant that massive quantities of food have to be imported. The food import bill, together with the energy bill and imported capital goods, have combined to strain the foreign exchange resources to breaking point and created chronic balance of payments deficits which need to be balanced by borrowing from the international funding institutions. Debt has thus emerged, crippling African countries performance, limiting their margin for manoeuvre and slimming their chances of recovery (Bush 1988). The African debt crisis is "probably the most prominent catalyst creating famine in Africa" (Ibid). By mid-1980s Sudan's external debt stood at about US\$ 13 billion with annual service charges claiming over 85% of Sudan's total value of exports (Ali 1985).

The debt problem is closely linked to issues of international trade and the activities of international lending institutions. Transnational corporations, backed by the power of their respective home governments, exercise influence over much of the international commodity trade. They manipulate pricing policies in ways that adversely affect the terms of trade of countries producing and exporting primary commodities. Producers and exporters of primary commodities will always experience deficits in their balance of payments. Some advocates argue that unless the international market relations are rectified, there is little optimism for Africa, and indeed, for third world countries. Lofchie comments on this trend: there is a strong presupposition that unless the international economic environment can be made more hospitable, internal policy reforms will fall short of triggering economic recovery (Lofchie 1984: 90).

Many have criticised the performance of international funding institutions and aid donors as being biased in favour of big projects. They have pointed out that World Bank and other aid donors have been enthusiastic lenders to big projects of dams, highways and electricity networks to urban areas, with the negative effects of reinforcing the

geographical bias in services and infrastructure and widening the development gap between regions. That the proclaimed "trickle down" strategy for development has failed to deliver the goods to the mass of the rural poor. These strategies confer their benefits on the already rich segments of society and concentrate on the already developed regions. These policies are basically differential in nature, benefiting only a handful of the elites, leaving the mass of the people behind fettered to pay off the debt bill. Ultimately these policies contribute to the conditions of rural poverty, migration, engender political discontent and national unrest. It has been contended that the World Bank's schemes to rescue the peasants from what it calls "absolute poverty" is in fact not intended to raise the standards of living of the poor in a way that would alter their position as an infinite source of supply of cheap labour. Rather, its consequences may well have been to set loan beneficiaries against the remainder of the peasantry, as limited credit funds will have to be doled out in piecemeal fashion (Sinha 1978: 377). Other observers have pointed to the commercial character of World Bank loans. The Bank raises and distributes some £3,000 billion of aid each year; and as a bank it has advocated and financed mostly "marketable" that is; "commercially profitable" projects. And as a development Bank, has been motivated by the need to repay depositors and hence to ensure a good return on the projects it supports (Lipton 1977: 14).

2- 3- 3- iv- Agribusiness and the International Grain Trade:

More intense discussion has recently focused on the activities of agribusiness transnational corporations (TNCs) and the nature of international grain trade, as bearing strongly on the weak economies of third world countries. Agribusiness transnationals exercise great oligopolistic control over much of the international grain trade. There are five major grain firms which account for 85% of the US grain export. Only four or five companies control 95% of world grain trade, (between them Continental and Cargil control nearly half, 50 million tons). American and Canadian-based transnational companies by their sheer sweep of power effectively set the pace and tone for the international grain trade. US and Canada released excessive grain stocks at relatively low prices in the 1960s. Their grain stocks in 1961 were 137 million metric tons, nearly $\frac{4}{5}$ ths of total world stocks. Releases of stocks by US Commodity Credit Corporation at an annual price rate not exceeding 20% of the 1960s price, and this set the tone for world grain markets ever since (Raikes 1988; Johnson 1975). The strong oligopolistic control over international grain trade and the issue of political power involved therein lie at the heart of the world food problem. Food aid as a solution to the problem has also been criticised. Some analysts view this type of aid with scepticism. It has been observed that in the 1970s about a $\frac{1}{5}$ th of US rice harvest (of one million tons) found its way abroad under concessional terms. Such massive quantities would have profound

disruptive effects on the world rice market by damaging world prices forcing uncompetitive producers out of the market, and finally setting the US effective control over the international grain trade. (Poleman T. 1974).

Agribusiness Transnationals wield sweeping economic and organisational power in international commodity trade. Some of these giant enterprises have far greater economic power than individual host countries. The scope and reach of the trading activities of these giant companies include trading in staple foods, animal feeds, fruit and vegetables, livestock and meat including the sale of high-quality breeding animals, artificial insemination, cotton and other fibres, seeds of all kinds including grasses for pastures, timber and related items, and the traditional tropical and sub-tropical products, etc.. Feder concludes that this new form of economy exceeds in scope, importance and impact the old plantation enclave economies beyond comparison (Feder 1975; Raikes 1988). Agribusiness TNCs have been criticised for their role in channelling third world agriculture to meet the market needs of industrialised countries. This is most obvious in Sudan where the *Gezira* Scheme, the largest single farm unit in the world, continues to produce cotton for the world textile industry. They do this by their effective control over production, pricing, processing and distribution of food-stuffs world-wide. In the 1980s, 25% of all cultivable land in the third world was turned over to cash crops for the markets of the industrialised world (Bush 1988b: 6). The case against agribusiness is critical of the way it structures the agro-food system in ways that increase inequality, dependency, poverty and vulnerability.

2- 3- 3- v- Conflicts, Wars & Refugees:

There are other themes in the holistic approach. Africa is viewed as a continent of generalised ailments of wars and refugees. Some critics have explained that the roots of wars lie in colonialism. That the colonial powers created the conditions for wars and political instability through the "partitioning" of the continent by drawing arbitrary frontiers, uneven development and through various devices of the "Indirect Rule" policy. Colonialism fostered social, cultural and religious contradictions which have eventually become disruptive to the stability and viability of many new independent states. In many cases, strife has taken the form of armed conflicts draining meagre national resources. The on-going civil war in Southern Sudan is an obvious example. The estimated financial cost to the war in Southern Sudan, for example, is about £S 1 million a day (Africa Watch 1990; Cater 1986). Dreze and Sen have pointed somewhat discreetly to the involvement of the big powers in third world war conflicts, and argue that one of the biggest contributions that the "big powers" can make towards the solution of the problem of world hunger is to refrain from fuelling arms conflicts in the third world. They say that:

The big powers have also been remarkably tolerant of regimes on their respective sides despite the persistent violations of the very principles of democracy ... It is a story in which there is little honour - either locally, or in the distant capitals from which many international conflicts have been pursued with such vigour and lethal arms pushed with such energetic cunning (Dreze and Sen 1989: 275).

The issue of wars in Africa is closely linked to that of refugees. It has been suggested that although Sub-Saharan Africa only has about 10% of the world's population, it hosts about 25% of the world's refugees; of approximately 2.5 million persons (Lofchie 1984: 88). In mid-1980s, Sudan hosted the largest refugee community in the world, estimated over a million from neighbouring Ethiopia and Chad (see appendix A).

2- 3- 3- vi- The Impact of the Oil Crisis:

The immense increase in liquidity which has accrued to the oil-exporting countries during and after the oil boom years, has negatively affected poor third world countries in two different ways. There is first the fact that increased liquidity or money supply without a corresponding increase in the availability of goods and services, has resulted in a general rise in prices. The effect this has had on developing countries are two-fold. (1) Directly, by straining the foreign exchange reserves as the energy bill has come to claim a large portion of the national budget. And (2) indirectly, through the general rise in prices of finished industrialised goods in the international market. Developing countries have found it increasingly difficult in this situation to meet their import requirements. Consequently they have become prone to facing a widening gap in their balance of trade, which they have to make good by resort to borrowing from international lending institutions, thereby adding to the already huge debt burden.

2- 3- 4 & 5- Entitlements and Food Availability Decline (FAD)

The FAD approach could be seen as a modernised version to the old Malthusian concept. According to the FAD view, famine arises from either an unproportional increase in population numbers in relation to available food supplies, or that some 'disaster' causes a short-fall in food output to meet overall consumption needs of a population. FAD draws an equation, measurable in some technical terms between two variables: population numbers and the volume of food available. It assumes for famine occurrence, as indeed the term implies, that there is somehow a disproportionality between the two variables. FAD accords with the Naturalist and Population theses on famine in two respects: that (a) a natural disaster causes shortfall in food supplies leading to famine, or (b) that: big increases in population numbers outstrip available supplies of food leading to famine.

2- 3- 4- i- Critique of the FAD Approach:

The FAD approach has come under severe attack. Some of the criticisms raised include the criteria used to measure food production. FAD uses a four-fold classification model for measuring food production: above normal, normal, below normal and substantially below normal. The question is under what of these production levels famine is bound to occur. Critics point out that there is no guaranteed safeguards for some people against famine even under "normal" levels of food output, nor is it conversely necessarily the case that famine would occur if food output drops to "below normal" levels (Sen 1981). This observation has been attested to by the evidence presented from famine situations in Africa and Asia. The evidence indicates that in these famine situations there has not been dramatic deficits in the volume of food. On the contrary, it has been revealed that food did indeed flow out of the Wollo district, for example, during the 1973-75 Ethiopian famine. And as a general indicator, the National Bank of Ethiopia reported a slight rise in overall output (Ibid).

FAD assumes that since food is available to meet on aggregate the per capita requirements of a population, there is no fear of some people going hungry. Critics of FAD point out that this simple aggregation can not explain people's differential abilities to command food. That, it does not take account of the distribution side of food. In the market relations, command over food follows economic power that can translate into effective demand, and tends accordingly to be unevenly distributed. Different groups of people will have different commanding abilities over the food they need, commensurate with their economic purchasing power. Thus the economically weak groups with ineffective market demand, will fail to establish command over food even though it may be available in the market. This is a major dividing line between FAD and the ET. While the FAD remains broadly aggregate focusing on the overall availability of food in relation to population numbers, the ET is essentially disaggregative, acknowledging the differential commanding powers and the resultant distribution constraints that befall various segments of a society. Dreze and Sen make this point of departure:

One of the central differences between the availability view and the entitlement approach, is the necessarily disaggregative nature of the latter in contrast with the inherently aggregative perspective presented by the former. (Dreze and Sen 1989: 30).

Dreze and Sen have warned that the FAD view can be particularly dangerous when decision-making concerning economic policies is involved. In such a case, FAD can lead to "official smugness" on the part of the authorities concerned. In a situation where meticulous decision-making is required, government officials often smug on the "satisfactory availability" of the food situation, ignoring, thereby, or covering up the

social realities of unequal access to food. This situation is apt to contribute to the development or continuation of a famine. They say:

The inadequacy of the availability view is particularly important to note in the context of the making of economic policy. Indeed an undue reliance ... on the availability view has frequently contributed to the development or continuation of a famine, by making the relevant authorities smug about the food situation. There have been famines ... in Bengal in 1943 and in Ethiopia in 1983, when the absence of a substantial food availability decline has contributed to official smugness (Ibid: 26-7).

FAD treats famine as a food disaster. It locates famine in the natural and normal, and thus implies uniformity and neutrality. The ET, on the other hand, views famine as an economic disaster, created by the collapse of people's market power and of their entitlements to food. The ET locates famine in the social sphere. It is not uniform, but differential. FAD says nothing about how individual persons and families fare in the struggle for food. Food may be available in the market, but because of poor people's inability to exercise effective market demand, they starve. Sen points to this differential nature of famine:

There is no reason to think that it [famine] will affect all groups in the famine-affected nation. Indeed it is by no means clear that there has ever occurred a famine in which all groups in a country have suffered from starvation, since different groups typically have very different commanding powers over food and overall shortage brings out the contrasting powers in stark clarity (Sen 1981: 43).

The ET logically raises issues of power and social differentiation. It focuses on: distribution rather than availability; different socio-economic and occupational groups; and the processes through which people establish (or lose) their entitlements to food. However, Dreze and Sen have warned against falling into the error of regarding the ET and FAD as being antithetical. They have shown that there are numerous and important links between the two. First, for some people, the food that they grow is also their direct entitlement. Second, people's abilities to command food is influenced by food prices, and prices are in turn influenced by the production and availability of food in the market. Third food production can also be a major source of employment and wage labour, and therefore enhances exchange entitlements. Fourth, if and when a famine develops, having a stock of food available in the public distribution system could be a useful instrument to combat famine and to counter soaring prices and protect people's entitlements (Dreze & Sen 1989: 25-6). The links, however, do not establish a tight connection between availability and entitlements in such a way that the food commands of different sections of the population move up and down together, in the same way as the total availability of food in the economy. Overall availability is thus a poor guide to the fortunes of different socio-economic groups (Ibid: 16).

Distribution is a central theme in the ET and one of major departure from the FAD approach. Sen emphasises this central divergence that: "Starvation is the characteristic of some people *not having* enough to eat. It is not the characteristic of there being *not enough* to eat (Sen 1981: 1). The centrality of distribution involved in the issue of food has implications for accountability of both internal and external agencies. Some people go hungry because the available food is not being shared between people on both the local and global levels. Although the international dimension to the concept of the entitlements failure is considered to lie outside the structure of the argument, it is nevertheless a logical corollary to it. It is logical to extend the argument to the international distribution of resources to see how some states can not buy their food requirements from the international grain market. The issue of distribution is by necessity an issue of immediate relevance to the international grain trade and to international relations of power in general.

The ET. could be regarded as an internally focused analysis on the conditions of famine. In the structure of the ET, socio-economic and occupational groups are depicted as being necessary for analytical purposes. The most vulnerable of all groups to famine are peasant farmers, landless farm labourers and pastoralists. Besides being relatively politically and economically powerless, these groups are moreover more susceptible to the vicissitudes of the environment and the fluctuations of the market. The vulnerability of such groups is a condition of economic systems that endorse legally sanctioned rights of private property and ownership. The legally guaranteed rights of ownership, exchange and transaction delineate economic systems that can go hand in hand with some people failing to acquire enough food for survival (Ibid: 20). In a private ownership economy, command over food could be effected through either "growing food oneself and having property rights over what is grown" or through "selling other commodities and buying food with the proceeds" (Ibid). For the groups mentioned there is no guaranteed security against hunger. Entitlements of these groups are subject to the potential danger to failure. The first category's entitlements is called "direct entitlements" involving exchange with nature. Failure of these entitlements results from natural disasters and causes a "direct entitlements failure". The second category's is called "exchange entitlements" involving market exchange. Failure of this group's entitlements results from the adversities of the market conditions, insofar as labourers and non-food growers acquire food by means of wages in the case of labourers, and cash from sales of other products in the case of non-food growers, both of whom are subject to the market fluctuations. These groups are particularly vulnerable to hunger and famine as their entitlements are sensitive to market shifts and natural hazards; in the sense that a natural stress (e.g. drought) can result in crop failure and consequently a direct entitlements failure. Similarly, a downward curve in wage labour, or an upward

market shift in food prices is more likely to result in an exchange entitlements failure. In the case of landless farm labourers: If food prices rise very rapidly, without money wages rising correspondingly, the labourers who have grown the food themselves may fail to acquire the food they need to survive. And in the case of peasant farmers; the precariousness of small farmers are hit by a collapse of their direct entitlement to the food they normally grow. The peasant farmer, like the landless labourer has no guaranteed entitlement to the necessities of life (Ibid: 21)

Another group that is susceptible to entitlements failure is the pastoral agriculturalists. This group may suffer loss of exchange entitlements in somewhat different ways from those of peasants and labourers. However, this group's effective demand is further restrained by three subsidiary factors in addition to the fall in agricultural output: (a) a fall in the market price of land, (b) loss of livestock and (c) fall in the market price of livestock. The plight of pastoralists is further compounded by both loss of and decline in animal prices. This was the lot of the pastoralists during the 1983-85 famine in Sudan.

Entitlements have a legal character, and the failure of some people's entitlements is a factor of malfunctioning of the whole system of the legality of rights in general and of food in particular. That the legal rights of property and exchange normally operative in the society may sometimes work in such a way that benefits some groups to the detriment of others.

The legal system that precedes and survives through the famine may not, in itself, be a particularly cruel one. That standardly accepted rights of ownership and exchange are not the authoritarian extravaganzas of a heartless Nero ... They are, rather, parts of the standard legal rules of ownership and exchange that govern people's lives in much of the world. But when they are not supplemented by the state ... these standard legal rights may operate in a way that offers no chance of survival to potential famine victims. On the contrary, these legal rights, backed by the state power that upholds them, may ensure that the "have nots" do not grab food from the "haves", and the law can stand solidly between needs and fulfilment (Ibid.: 23).

The critical question here for the ET is perhaps why is it that some people or some groups fail to establish the legal rights to produce or exchange their food needs? Why is it that they remain in such precarious and vulnerable position in relation to the laws of ownership and exchange? Arnold raises this critical point:

Even the system of "exchange entitlements" begs question as to why certain sections of society were placed in such dependent and precarious relationships that even without a real decline in the actual availability of food they could still be left without either work or food (Arnold 1988: 46).

The concern here is with the market as a central point in the analysis of food acquisition, and where it comes into the concept of exchange entitlements. Evidently, the legal rights of ownership and exchange are mediated through the market. Dreze and

Sen perceives of these legal rights (and hence of the market through which they are mediated) as "parts of the standard legal rules of ownership and exchange that govern people's lives in much of the world". This conception places the legal rights of ownership and exchange and the market in the standard and normal. It does not question the socio-historical processes through which these rules have come to be legitimised and normalised. The ET gives no account of the processes of social power at work underpinning such apparently "standard" rules. It does not say how dominant groups in the society tailor the laws of ownership and property rights to serve their interests. The market is a "nexus"; a "socially created" arena (Watts 1984; Bush 1988). The ET can be appreciated as providing the theoretical framework to question the apparently normal socio-economic relations. Sen gives us the framework to ask a set of questions about the possible causes of famine. He also enables us, as Bush observes, to ask: *who* is dying, *where* and *why*. As Watts intimates: "the particular significance of Sen's (1981) analysis is precisely to question the economists' conventional story by posing economic relations and the market as socially and politically constituted" (Watts 1991: 8). This locates power in the market-place. Watts has raised this point in what he calls the "notion of history". He points out that "Sen is on somewhat shakier ground when he turns to history". That the ET focuses on the "immediate relationship between food and certain sorts of people", and "less on the processes producing a crisis of social reproduction; i.e. the historical political economy by which certain sorts of entitlements come to be socially distributed. In this sense it is questionable what sort of causality Sen has identified" (Watts 1989: 15). Watts argues that insofar as Sen himself notes that entitlements are mediated by legal and property relations, these necessarily demand a detailed examination of the socio-economic structures of society. He concludes that a history of a different sort is required to fully understand the causal links, namely a history of the "sources of power". The ET then does not go further to fathom the socially differentiated power in the struggle over food. It does not question the socially constituted nature of the legality of ownership and control over resources. Watts hints at this point that: "[o]ne needs to know how enforceable and legitimate are the legal and property relations which mediate entitlements and to recognise that all such rights are negotiated and fought over (Watts 1991:16). And since the legal rights of ownership and exchange are daily enacted and mediated through the market, the market becomes the arena of power struggle. This necessarily locates power in the market. The ET does not take us as far as the arena of struggle, it ushers us to its threshold, notwithstanding.

Bush views the market as a "social and material institution" (Bush 1988). Elson (1988) sees the market as a "nexus" between buyers and sellers, but that "this nexus has to be made". Such a social view to the market strikes to the heart of famine analysis. The market-centred view, as Watts observes, is now deeply enmeshed in famine

discourse; what he calls "the social relations of trade and production". The market view to analysing famine allows us not only to account for the loss or maintenance of entitlements, but also to say who is victimised, under what conditions and why. Some studies (Gibbon et al 1994; Clough 1985; Saul 1988; Sutter 1987; Bonfiglioli 1988; White 1986; Bush 1986; Watts 1984) have documented the crucial role the market plays in the creation of famine. From international capital to the state's monopolistic control policies via marketing boards, to the regional trade collusion and cartels, down to the village trader, the market power is systematically turned against the rural poor. Local producers are forced into distress sales at harvest time or during periods of stress. Cumulatively, the market processes lie at the root of rural poverty and vulnerability to famine.

2- 4- Crisis Literature and the Research Questions:

Theories of famine have been conceived hastily at the time of "crisis", and have offered a wide spectrum of explanations. As Grigg (1985) notes the literature on famine has produced a "bewildering variety of causes": excessive population, the greed of Europeans and their addiction to meat, the evils of colonial and neo-colonial exploitation, the backwardness of traditional farmers, the spread of deserts, and the heating up, as well as the cooling down of the earth's atmosphere (Grigg 1985: 3). It is not surprising, under this "bewildering variety" of explanations, that famine theories have offered to the best only partial explanations to the multi-faceted problem. A proper understanding of famine is necessary for effective policy-making if famine is to be eliminated. The policy recommendations and development packages that have been based on hastily conceived notions, have failed dismally to salvage the food crises. Instead, after more than three decades of such policy recommendations, the food crisis in Sudan (and in Africa generally) is still deep in the mire. Journalistic tradition about famine presented powerful images, loaded with commanding urgency. But this representation surely presents us only with a photographic snap, divorced of its historical context, and can be distorting and misleading. The images can arouse suspicions and questions, accusing everyone that "something terribly criminal is going on" (Dreze and Sen 1989; Watts 1991). They can also engender a sense of pessimism and defeatism in the absence of a proper understanding. As Parker (1989) has warned:

media images become implicit reference points [for representations of African crises]. The images oversimplify and distort reality. By providing misleading presuppositions they obstruct accurate perception and clear thinking (Parker 1989: 27).

The confusion of famine theory is partly to blame. The role of research must be to give those images meaning and context. This research is an attempt to address some of the gaps in the debate on famine. It is an attempt to contribute towards a better

understanding of recurrent famines in Sudan. The contribution of this research is to put the diverse and seemingly heterogeneous causes of famine into context. We are suggesting a broad historical/ political approach within which the multitude of factors can be accommodated, and understood. The literature on famine in Sudan falls into one or the other of two traditions: the journalistic tradition, and the academic tradition. We are here concerned with the latter which includes a score of studies which have either tackled the problem from a macro-level approach, focusing on the Sudanese economy and policies, and international processes; or else dealt with the problem at the micro-level of the actual victims in the rural villages (De Waal 1990; Keen 1991, 1994; Shepherd 1988; Bush 1986, 1988; Duffield 1992). None of these studies have sought to relate the macro- and micro-level processes and the linkages between the international, national, regional and local interrelationships which we argue are essential for the analysis and proper understanding of such a complex phenomenon. Nor have they examined in detail the ways through which the local communities have responded to external pressure and environmental stress, and the strategies which they employ in coping with famine. Famine could be utterly unintelligible if it is to be reduced to the narrow confines of a single theoretical paradigm, or to an event such as a drought or a crop failure. Any thorough and comprehensive understanding of famine will have to construe the social history of society, the history of the social relations of power, of dominance and subordination; the social arrangements or the "totality of rights " as Sen calls them, that govern the fortunes of different social groups in the struggle for control over resources including the struggle over food (Watts 1991; Sen 1991; Bush 1986; Dando 1980).

This research tries to fill some of these gaps. It looks at the missing links which bind the multiplicity and interconnections of factors that are inevitably enmeshed in the phenomenon of famine in Sudan. The research traces the interconnections between the macro- and micro-level processes. It also makes a contribution to an understanding of the positive experiences of the rural communities in the semi-arid environment in *Kordofan*; Western Sudan in dealing with political pressure, economic change, the environment and the associated problems of food shortage. The research examines the processes that in the recent history have contributed to weaken the people's traditional ways of survival and strategies of coping with conditions of stress. This requires a thorough examination of the social history of the Sudanese society. It seeks to explore the historical processes that have shaped the existing power structures in Sudanese social relations. The study aims to establish the links between these social structures and how they relate to the creation of certain patterns of vulnerability among certain groups and the consequent occurrences of famine.

The recurrence of famines in Sudan over the last three decades, raises questions as to why Sudan has become so vulnerable to famine in spite of all its natural agricultural potential. At the same time, not all Sudanese suffer from famine to the same degree. There are some regions in the country in which famine has become endemic and some sections of the population who have become particularly vulnerable to stress conditions. These constitute the mass of rural populations in the peripheral marginalized regions in the Western, Southern, and Eastern parts of the country.

In order to fully understand the phenomenon of recurrent famines in Sudan, it is important to understand the causes of vulnerability, deprivation and poverty which lie at the root of the problem. Such an understanding requires an examination of the interactions between natural (drought) and man-made causes, internal policy failures, market failures, international constraints, as well as the responses of the affected populations to these pressures operating upon them. This thesis takes a broad historical perspective which tries to disentangle the socio-political and economic structures of the Sudanese society, and the relations of power in that society since the turn of the century. Famine in Sudan, we argue, is the result of complex long-term interactive causes, which have a historical socio-economic and political character. We argue that the broad perspective also allows us to assess how the processes of change have impinged on peoples' survival strategies to cope with the drought and stress. We specifically address the following questions:

- 1- Why has Sudan become so vulnerable to famine recently?
- 2- Who suffer from famine in Sudan? and why?
- 3- How have the people coped with droughts and stress in the past?
- 4- How and why their former security has been weakened in the more recent history?
- 5- What is the role of the drought in the occurrence of famine? Can drought be understood solely as a natural phenomenon? or as a man-made one?
- 6- What is the role of politics in drought and famine?
- 7- What are the local people's responses to political/economic pressure, environmental stress, and social change?

In order to try and answer these questions, they need to be understood in a wider historical, political, social and ecological context. Such a broader perspective allows us to understand the complex interconnections between social adaptations to external political pressure and economic change, as well as to environmental stress, and the continuities of these adaptations across time.

2- 5- Identifying the Famine Victims in Sudan:

At a macro level, the classical famine victims are the rural communities in Sudan's peripheral regions: of Western, Southern and Eastern provinces. The recent famine in

1990-91 has added further new social groups, not traditionally classified as such. These new groups include wage labourers and small salaried employees. This followed the fast acceleration of the process of impoverisation of whole communities and occupational groups. However, this macro-level analysis is rather crude, and can provide only general indicators. It does not say why even within these marginal communities, some individuals fare better than others. At a micro-level, it is our contention that famine victims are always those whose surplus labour value has been siphoned off through market forces. They are the subjects of the market who are kept farther away from a "trade line". The "trade line" as I call it, is the conduits of hierarchical structural flow of capital, top down flow of what the World Bank would call "trickle down" of resources. We argue that the "trickle down" strategy does not in fact reach the lower reaches of society. Rather, it creates a line of trade of beneficiaries at different levels from the international, national, regional to the local village level, a line of trading activities. It is only logical that international capital funds destined to develop agriculture and to trickle down, can not conceivably do so for all. It has to be selective, and rationed out to certain "eligible" groups, possibly those with the highest market-oriented proclivities in order to carry out the task of reaching the most remote communities and open up new markets. That, we argue, is what international aid has actually done; the creation of a "trade line". The better placed people are in relation to this line, the more assured they are of funds and of living; the more farther removed from it, as in the case of the majority of the village peasantry, the less secured they are against the uncertainties of nature and the insecurities of life. More precisely, at a micro-level analysis, the famine victims are those who lose in the market place. They are the subjects of trade; the weak partners in the market exchange relations who sell in distress and are taxed when they buy. Resources from the primary producers; the village peasants, move to the village trader, to the regional merchants, to the national state parastatals and exporters to outside markets. The way in which these two processes; of the flow down of capital along the trade line to eligible partners of trade, and that of the upward siphoning off of rural resources, form the specific unequal market exchange relations between merchants and producers, between capital and primary commodity production. It is at this specific unequal market nexus that rural producers lose and starve. Because the Sudanese economy is heavily dependent on the traditional sector for the generation of revenue, poor producers bear the overwhelming burden in debt repayment. It is at this level that we draw the relationships between international aid packages, debt, and rural poverty. And this is why we make the global market system our unit of analysis, in which the rural poor represent the weaker partners and ultimately become the victims of famine.

2- 6- Famine as historical process: an alternative view:

The argument in this study precludes the view of a generic famine that could be analytically squarely put in any one particular theoretical framework. We stress the historical specificity of famine to the extent that even in Sudan the 1990-91 famine differed in many respects from that of 1983-85. It is because each famine has its unique character, that the vast ensemble of seemingly heterogeneous factors can only make sense and can be meaningfully understood if read in their broad historical context. In this argument we identify two types of processes: macro-structural long-term processes producing certain patterns of vulnerability, and micro-level ones. The macro-level processes, are enacted on the spheres of the state and in the international arena. On the level of the state these take the form of policies and power relations, that have been shaped over the years and adversely bearing on the fortunes of certain sections of the society leading to long-term patterns of vulnerability. On the international arena this takes the manner in which the Sudan economy has been incorporated in the world market system since the colonial period. Inevitably this unfavourable relation has produced negative results: negative terms of trade, growing balance of payments deficits, shrinking imports, precipitous growth rates, borrowing, huge accumulated debt, rising inflation and a general deterioration in living standards. This situation has greatly handicapped the state's action to intervene and moderate the stress at times of shortfall by purchases from the international grain market, thus causing a vulnerability of a super-structural nature. The relationship between the national and international is not lineal and is therefore not amenable to separate treatment for each dimension. Rather these processes are seen as interactive and interweaved reflecting the workings of the international system of which the Sudan is a part, annexed to it through the agencies of the state and the national bourgeoisie. We present these macro-structural processes as a continuum taking a historical trend. We argue that these macro-structural tendencies are responsible for the creation of the conditions of famine; of vulnerabilities, impoverishment, underdevelopment, alienation from long established self-provisioning systems.

However, we recognise that this type of macro-level analysis, does not capture the full details of the famine situation. It leaves unanswered the question of how individuals and rural communities respond to such extraneous macro-structural forces. In order to remedy the shortcomings of a macro-level analysis, we identify the second type of processes: the micro-level processes of famine at the grass roots with the people who experienced famine in the villages of rural *Kordofan*. Here we are concerned with the nature and dynamics of the famine experience, of how some people fare better and some lose, the ways in which the state's policies exacerbate rural vulnerabilities, what is the validity of "natural" causes, and what coping strategies these communities employed in

the past to cope with the vicissitudes of their environment and what caused these to be undermined. The study traces the processes at three different levels: (a) at a macro level, (b) at a regional level, and (c) at a micro level.

2- 6- 1- At the macro level : State Policies

The areas of the state's policies which have had direct bearings on the fortunes of the rural populations in *Kordofan* will be identified. But the state is not independent from external influences which directly affect its actions and policy choices. The state, we argue, because of its weaknesses, functions as agency which facilitates the flow of surplus value of rural agricultural labour, and the subordination of rural communities as a vast pool of cheap resources whose labour power can be manipulated through the state's policies to serve the interests of the ruling elites and their overseas partners and clients. The state's ruling elites perceive that their economic interests lie outside with those of their overseas partners with whom they also identify ideologically as belonging to an international bourgeois milieu; a "lumpenbourgeoisie", cutting across national boundaries. We will address the questions related to the nature of the relationship that has existed between the modern Sudanese state and its external allies on the one hand, and between it and the region of *Kordofan* on the other, and how national and international interests militate against those of the rural poor. The type of state policies and the nature of this relationship led to the marginalization of the region both politically and economically in the recent history of Sudan. Underrepresented, politically unorganised, and lacking in political and economic leverage the rural communities have become areas of the state's extractive policies and the exploitation of its allied merchant class and foreign interests.

In order to account for the marginalization and underdevelopment of the rural communities, we need to trace the historical political developments in the country since the colonial era in order to see how the colonial state established political and economic structures suitable to its interests. And on the eve of independence, how the colonial administration carefully bequeathed political power to certain groups from central Sudan whose interests accord with those of the colonial metropolis. The colonial political and economic structures have remained unchanged until the contemporary period, attesting to the failure and inertia of successive national governments in Sudan. No wonder, then, that large segments of the rural populations in the Western, Southern and Eastern regions have been put in a state of chronic poverty and vulnerability to famines. A historical account to bring under focus the existing political structures and internal relations of power is required. This account will bring to the open how famine-affected regions have been marginalized, underdeveloped and underrepresented in the state's political structures.

2- 6- 2- At Regional Level: (El-Obeid market organisation and structure)

The regional structures provide the intermediary link between the international and national, on the one hand, and between national and local village levels on the other. In the analysis, vulnerability of the rural communities to famine is seen to be the outcome of a long-term process of impoverishment and exploitation. This process is illustrated by the drain of rural resources from the village, to the regional centre, to the national centre and to distant international markets; systematically effected through market forces. Ultimately, such analysis challenges the "trickle down" theory in its basic tenets of development. Our contention is that the capital that is supposedly to "trickle down" to the lower reaches of the production process, does not in fact do so. It falls short of reaching the actual producer. Quite the reverse; it benefits only those on the "trade line" who use it as a means of power to drain rural resources to their advantage, in what may be termed as a "resource drain", and not a beneficent "trickle down" process.

El-Obeid is the regional capital city of *Kordofan*. It assumes international importance as the world's biggest market for gum Arabic exports. It also commands a big share for oil-seeds and livestock trade. With such an economic significance, *El-Obeid* attracts both local and international capital. Its market organisation and its internal structure exhibits unique and distinctive features. As an important regional trade centre, *El-Obeid* provides a link between national and international capital on the one hand and the capital of local traders on the other, both meet and feast on a lucrative trade of cash crops produced by the village peasantry. The in-coming capital either from inside the country or from distant international centres, is usually stationed at *El-Obeid*, particularly at harvest times and never finds its way to the actual producer. Representatives of national and international firms, companies and banks come to *El-Obeid* at harvest times in order to conduct purchases of produce on behalf of their respective firms. Many of *El-Obeid* merchants themselves engage in the trade on their own or act as agents for other firms or banks. *El-Obeid* merchants determine not only the sale prices of rural agricultural and animal produce, but also the prices of imported goods- a trade they predominantly control. They control both ends of the regional trade, the purchase and sales prices. Local traders, on the other hand, bring in to the regional market the crops which they have purchased from the village producers. It is important to note how these two groups of buyers benefit while the actual producers lose in an unequal exchange relation determined by an unequal balance of economic, political and financial power.

Most importantly, however, *El-Obeid* market has set the tone and pace for the production and consumption patterns all over the region. It sets the mood and the necessary distributive channels for the consumer goods to penetrate deep into the remotest rural communities; thereby contributing to the gradual alteration of long

established production and consumption patterns. After dispensing with their truck-loads of cash crops, local village traders purchase consumer goods from wholesalers to transport and sell to the village people at inflated prices. The market and the village traders, serve a crucial role in the mercantile chain as entrepreneurs opening up rural markets for the capitalist mode of production and consumption. The consequence has been further alienation of the rural communities from their self-provisioning survival systems, rendering them more and more vulnerable to food insecurity and famines.

Another important feature of *El-Obeid* market is that it is dominated by the *Jellaba* (literally meaning itinerant traders, but became a designation of the peoples of the Northern Sudan), who have their origin in the centre of Sudan. The *Jellaba* exercise monopolistic control over almost all economic activities in *Kordofan* to the exclusion of indigenous participants. Their monopolistic control over the market has been facilitated by their privileged position as belonging to the dominant political groups. This position has enabled *El-Obeid* merchants not only to have a free hand over regional resources, but also to have an influential say in who will ascend to key positions in the regional government. They directly dictate to the central government their preferences on matters of political appointments, to which the latter usually acquiesces for considerations of kinship as well as mutual political and economic interests. In this state of affairs both the state's official regional governing body and the merchant lobby meet in an unholy alliance against the interests of the entire rural communities. Therefore, practices of hoarding, monopolising and cartel-forming are rampant phenomena in *El-Obeid* market, as the entire regional trade is concentrated in the hands of a few merchants. Fearless of governmental accountability, (as government regional officials are themselves part of the design), these merchants inflict damaging exploitation on the rural populations particularly at times of dearth. The effects of these processes on the poor are devastating. At times of shortfall in food supply, the tragedy of the poor is doubly compounded by merchant greed and official corruption, leaving the poor to the devil, while the merchants and their official allies thrive.

El-Obeid Chamber of Commerce is a good example of the distortion of the market. Its members are composed predominantly of the *Jellaba* merchants, who have little concern for the benefit of the people of *Kordofan*, but interested only in making big profits out of trade. The criticism here is not about making big (sometimes illicit) profit, but in the way the members of the Chamber invest their profits. The example of *El-Obeid* Chamber of Commerce illustrates how massive capital that has been accumulated through a process of "rural mining" of *Kordofan*, is never invested in the development of rural resources or services in the region, but is transferred to the centre to invest in industries or in big projects elsewhere. *El-Obeid* grains market merits special attention. We will see who controls the regional grain trade, the lines of production and the

channels of transport and distribution. We also document, where possible, the collusive behaviour of traders at times of stress and how merchant cartels exacerbate rural vulnerability to famine.

2- 6- 3- At village level: the field-work:

We have tried to ascertain causes to a number of related questions: what survival strategies had in the past enabled reproduction of the social system; how economic transformation and social change attendant on the processes of integration have affected the local food systems; and what has the impact of these politico-economic processes been on the capacity of the local systems to support its population in the context of resource utilisation and environmental stress. A field-work study has been carried out over a period of six months (between December 1992 and May 1993) two villages: *Al-Saata* and *Omdofais*, representing the two communities of *Dar Hamid* and *Dar Hamar* respectively. The role of the field-work study is to provide a detailed account on the processes of famine on the micro-level of the village, to complement our analyses on the macro-level policies of the state, and on the regional-level of Kordofan. The field-work study, focusing on the micro-level processes is considered to be a major contribution of this research to fill in the gap in the existing literature on famine in Sudan which has so far focused on the macro-level processes only.

The significance of the field-work is to support our theoretical analytical framework with empirical data. This study has adopted a holistic/historical framework, which we argue is more appropriate and superior to other approaches as explanation of the phenomenon of famine; like naturalist or economist explanations. The rationale of the field-work is to complement our analyses on the long-term historical processes of change attendant on the macro-state policies of rural transformation. This is done by giving a detailed account on the concomitant changes taking place on the village level over time.

2- 6- 4- Procedures of data collection and rationale:

Gauging the depth and impact of change on the village life in the course of time has been the determining factor in identifying the type of data to be collected. The changes that are required to be measured are perceived to be those affecting the quality of life for the local community, as well as those affecting the levels of incomes and expenditures determining the degree of wealth or poverty of individual households. In order to obtain these types of data, we have formulated the field-work questions to obtain both qualitative and quantitative data. The qualitative-type data are obtained through open discussion interviews with the adult village members, and with older men and women to elicit information about the past. While the quantitative type data are meant to give

estimates on the present conditions in terms of levels of production and consumption, and on incomes and expenditures which provide some indicators on levels of wealth and poverty in the villages. The exercise of the field-work is intended to give us a picture of village life under the forces of contemporary changes, and to enable us see who among the village populations have become more vulnerable to famine conditions, and who are not. It is also hoped to inform policy making with regard to targeting the more vulnerable groups in times of crises.

There are, however, some limitations of the field-work. Foremost, is the unreliability of the quantitative data, owing to the absence of accurate statistical records in the villages. The village respondents relied on memory, which can be unreliable. However, the scanty statistical data obtained from the villages have been supplemented by data from some studies which have been carried out in the area between 1985 - 1992. Additionally, vast distances, poor transport in rural Cordoban, and lack of funds have also been some of the disadvantages in collecting and verifying the data.

The two communities of the study: *Dar Hamid* and *Dar Hamar* of Northern Kordafan inhabit the semi-arid zone close to the Southern desert fringe, forming part of the Sahel zone. They are agro-pastoral whose members combine traditional rain-fed agriculture, gum Arabic collection with animal herding. The choice of *Dar Hamid* and *Dar Hamar* has been determined by the purposes of inquiry propounded in this study. Not least because the area received insufficient attention as an area of vulnerability, the communities have been especially hard hit by the recent famines. What sets *Dar Hamid* and *Dar Hamar* communities apart from other communities in the region is that they combine agriculture, gum Arabic collection with pastoral production which makes possible the analysis of diverse livelihood strategies. It is one of the aims of the study to explore the diverse strategies the local communities use to cope with the uncertainties of their natural environment. It also enables measuring the effects of both agricultural and pastoral practices on the environment. The choice of the two communities is not intended for comparison, but aims to cover a wider geographical area affected by the recent famines in order to give the findings more validity than if only one community is studied. The geographical location of *Dar Hamid* and *Dar Hamar* as part of the Sahel zone makes it possible to assess the climatic variation and the impact that might have had on food insecurity in the area. Its geographic location is also suitable, for it occupies part of the Northern limits of the acacia Senegal belt, in which *El-Obeid*, the regional capital of Kordafan occupies the centre as the world's biggest gum Arabic market. This location makes possible the analysis of how gum Arabic and the other cash crops are being traded and marketed from the village, to the regional centre and beyond. Both *El-Obeid* and *Omdurman* are market centres for livestock from the area. The location also

makes possible comparative analysis of prices between the village and regional markets to determine rural terms of trade.

Conclusion:

This chapter has evaluated different approaches to explaining famine. It has shown that the different famine theories have offered partial, divergent and sometimes conflicting explanations of famine. The consequence of such divergence of opinion has been poor policies, and in spite of all efforts, famine still persists in Sudan and elsewhere. We argue that deficiency in theory is partly to blame. This study has proposed a different approach to understanding the causes of famine in Sudan based on a broad holistic/historical perspective which gives the seemingly heterogeneous causes context and meaning.. The holistic/historical approach is superior to other approaches in that it accommodates the diversity of causes in the study and analysis of famine, and gives these coherence and relevance.

Chapter 3

Adaptations and Survival in Old Kordofan

Introduction:

Conventional famine theory has treated famine as an "event" divorced of its historical context. The treatment of famine as an event is largely responsible for much of the misunderstanding of the phenomenon since it mystifies and obscures the underlying causes which originate in long-term processes that reach far beyond the immediate trigger factors such as a drought or harvest failure. The treatment of famine as an event divorces it from its context. This chapter provides the historical context against which famine in *Kordofan* can be explained. It lays out the historical background of two rural communities, and traces their way of life in the semi-arid environment of North *Kordofan* in former times, and argues that the adaptability of these communities had enabled them to survive the vagaries of nature. It is only in the recent history of the region under the incorporation of *Kordofan* into the fabric of the modern Sudanese state that these rural communities lost their capacity to cope with stress under the impact of exogenous forces.

3- 1- A SHORT HISTORY OF KORDOFAN

3- 1- 1- *Kordofan Before the 19th Century: (the Fur and the Fung Hegemony):*

The ancient history of *Kordofan* prior to the Egyptian invasion in 1821 was little known; and the scanty material that is available is found in scattered evidence in the accounts and writings of travellers and geographers. The task of attempting to construct a picture of ancient *Kordofan* is very difficult. The difficulty is partly due to the fact that in *Kordofan*, unlike the other Sudanic Kingdoms, e.g. *Sennar*, *DarFur*, *Wadai*, *Burnu*, etc., there existed no records or chronicles kept in the Royal accounts from which accurate information could be obtained. However, the available evidence suggests that the earliest inhabitants of *Kordofan* were the ancestors of the present-day *Nuba* who occupied the land in the times of the Pharaohs and extended as far north as Halfa. The ancient Egyptians no doubt had political and trading links with them as the evidence in the Pyramids, graves and drawings in various relics of the ancient Egyptionics suggests. In the fourth millennia BC, the Pharaohs of the Fourth, Fifth, and Sixth dynasties at intervals raided or traded with the Sudan (Government of Sudan 1912; Mac Michael 1912, Lloyd, Watkiss [Captain] 1910).

The peoples who inhabited the territories of *Kordofan* before the fourteenth century were thought to be those mysterious race called the *Anag*; a race now extinct, but to

whom any signs of human occupation previous to the coming of the Arabs is invariably attributed, Archaeological traces and findings appear to confirm the view that Northern *Kordofan* was indeed the early homeland of the *Anag*. The *Anag* are almost unanimously said to have formed the aboriginal populations of these northerly parts of *Kordofan*, and extending to the Libyan Desert, and east to the Nile. The *Anag* are said to have been a fair-haired pink-skinned race, and evidence suggests that they are connected with the old Berber tribes (Mac Michael 1912). The indigenous original inhabitants of *Kordofan* in more recent history were the *Nuba*. The *Nuba* were thought to occupy the entire land extending from the Lakes to the Libyan Desert. In 1275 the Arabs annexed the Sudan; and indeed since the time of the Arab conquest of Egypt, *Kordofan* and the rest of the Sudan became gradually permeated by a constant influx and infusion of Semitic blood. The coming of the Arabs in about the fourteenth century, added a new important dimension in the political and social history of the region, and made *Kordofan* what it is today, a mixture of diverse African and Arab origins. Indeed, *Kordofan* is Sudan's most ethnically and culturally diverse region; and as such it is indeed a microcosm of Sudan, and its African-Arab dichotomy is clearly manifest.

The history of old *Kordofan* differed from that of other ancient African kingdoms that flourished in this central part of Africa and gained wide fame such as *Sennar*, *DarFur*, *Wadai*, *Burnu*, *Kanem*, *Bagermi*, *Sokoto* etc. The differences between *Kordofan* and these other kingdoms being that while these latter formed powerful centralised organised states ruled over by royal dynasties, *Kordofan*, on the other hand, lacked such a centralised system of authority. *Kordofan* had never formed an independent state organisation. Consequently, its records have not been kept continuously, as happened to some extent in the case of the above-mentioned states, whose rulers, for their own glorification and according to the common practice of all independent states, have preserved a more or less true, though highly coloured accounts of their past history. Instead. it had always been an independent free zone territory, which variously fell under the real or nominal rule of its more powerful neighbours, namely *Sennar* and *DarFur*.

The relationship of *Kordofan* with *DarFur* dates back to the time of two dynasties. the *Kungjra* and the *Masabaat* who entered *Kordofan* from *DarFur* and subsequently ruled the country. In the eighteenth century, probably between 1768 and 1776 there emerged a prominent *Masabaat* leader, *Sultan Hashim*. He united the *Masabaat* in *Kordofan* under his leadership and drove out the *Fung*, who then laid nominal claim to the country, seized *El-Obeid* and made it his capital (Mac Michael 1912; Government of Sudan 1912; Captain Lloyd, Watkiss 1910). The *Fur* continued to rule *Kordofan* until the time of the Egyptian Conquest in 1821. The *Fur* rule over *Kordofan* was generally considered to be beneficial as there prevailed a certain degree of stability which

contributed positively to production and to the flourishing of trade and a general prosperity. The rule of the *Fung* over *Kordofan* is said to have lasted only for seven years. During this time, *Abu Likeilek*- the *Fung* ruler over *Kordofan*- was mostly preoccupied with repulsing the attacks of the *Fur* from the West (Ibid). It can be inferred that the *Fung* rule over *Kordofan* was transient and only nominal. However, the significance of the *Fung* rule was that it brought the region more into contact with the peoples of the Nile Valley which was to have important implications in subsequent histories of the regions as *Kordofan* became more and more assimilated and drawn into the fabric of the central Nile Valley and Eastwards into an Arabic-Islamic cultural orbit.

In the days of the *Fur* and the *Fung*, *Kordofan* continued to be prosperous and peaceful; paying a voluntary present to the *Fur* Sultan. Cultivation and animal husbandry flourished, merchants were exempted from all duties and commerce extended in all directions. Caravans brought goods from Abyssinia, the interior of Africa and from Egypt into the towns of *El-Obeid*, and *Bara* from which centres the greater part of this trade was then passed into the hinterland. This represented the golden age of *Kordofan* (Pallme 1844; in O'Fahey 1980). This state of general stability and prosperity in *Kordofan* was ended by the Turko-Egyptian invasion in 1821.

3- 1- 2- The Turko-Egyptian Rule over Kordofan:

The Turko-Egyptian rule was the first true experience of *Kordofan* populations of organised political rule embodied in formal modern state institutions and exercised by a powerful alien central political authority. The experience, as can be expected, proved to be both traumatic and inspiring; which in the end led to a nation-wide liberating revolution that engulfed the whole of Sudan; which sprang essentially from *Kordofan*. As part of the grand design of *Mohammad Ali Pasha*, then Viceroy of Egypt, to achieve independence from the authority of the Turkish Sublime Porte in Constantinoble, he extended his dominion into Sudan in order to secure money and men to consolidate his power and achieve his goal of independence (Na'om Shuqair 1903; Arkell 1961). Accordingly, he invaded and captured *Dongola*, sent one army to invade *Sennar* and another to *Kordofan* under the command of his son-in-law, *Mohammad El Defterdar*. *El Defterdar* advanced towards *Kordofan* with a force of 4000 cavalry and infantry, 10 pieces of artillery and 1000 Bedouins (Government of Sudan 1910, Mac Michael 1912, Arkell 1961). The invading army met at *Bara* with the army of *El-Makdum Musallem*, then Governor of *Kordofan* of the *Kungara* ruling dynasty. Firearms were unknown to the latter army, and *El-Makdum* was killed in battle, his army broke rank and *Bara* was pillaged. Two days later, *El-Obeid* suffered the same fate at the hands of the invading Egyptian army in 1821. The last resistance of the Arabs came from the *Hamar* who were shortly defeated and the Egyptian rule was firmly established. The conquerors

(usually spoken of as the *Turks*) at once initiated a reign of terror, administering the country in defiance of every law of humanity and justice, entirely for their own personal benefit. When the heavy taxes levied could not be paid in cash, grain, cattle or slaves had to be delivered instead. Actual raiding for slaves in the *Nuba* mountains by organised military expeditions was undertaken annually, and by 1839 by this means alone more than 200,000 had been led into captivity (March 1948). Pallme describes in 1844 the extent to which the state of affairs inside *Kordofan* had degenerated:

no pen can describe what oppression the country (*Kordofan*) ... subjected, all signs of wealth have entirely disappeared, and it is, as it were, drained by the Turks. Many of the natives, tired of this oppression, have migrated with all their possessions ... nothing is now discernible but poverty and misery (Pallme 1844: 16).

The vicious exploitation of the population, the slave raids, the exorbitant taxation system and the extortionate manner in which it was collected, coupled with the gross mismanagement, abuse and corruption of the administration, turned *Kordofan* population into a desperate discontented mass, only to form the breeding grounds for a nation-wide popular revolt against the oppressors when the rallying call of the *Mahdia* was echoed. *Kordofan* discontented populations were the first to answer the call of the *Mahdi*; and from *Kordofan*, it gained grounds and in due course engulfed the whole of Sudan.

3- 1- 3- *Kordofan and the Mahdist State:*

The short-lived *Mahdist* state brought *Kordofan* no salvation, although the Revolution owed almost its entire success to the people of *Kordofan*. Although most of the *Ansar* were drawn from *Kordofan*, and the *Khalifa*, himself a *Baggara* Arab of *Kordofan*, became progressively distanced from his pastoral background, and sought to build a modern urban-based political authority. The *Khalifa* empowered his Amirs, *al-Khateem*, then *Mahmud wad Ahmad*, in *Kordofan* to carry out his policy of enforced migration to *Omduramn*. The tenets of the policy was to effect a wholesale mass migration of the rural communities from their homelands to join the armies of the *Khalifa* in *Omduramn*. The *Khalifa's* aims of the policy were three-pronged. The more obvious aim was first to consolidate the rule of the *Mahdist* State by enlarging his armies destined to meet the imminent military threats and the approaching Anglo-Egyptian forces. A second strategic aim was to pre-empt and undercut any possible invasion by the enemy forces from the direction of the north-west via the Desert, which the Egyptian and British intelligence were active to instigate the tribes against the *Mahdists*; capitalising as it were on the very bad and deteriorating general conditions and using the *Kababish* as aides and spies (al-Atta 1973; Mahdiyya Reports 1316 Hijri [1898 AD]; Government. Intelligence Report 1912; Mekki Shbieka 1967). However, a

third political motivation for the policy of enforced migration was the *Khalifa's* apprehension of the ungovernable character of the tribes who could pose potential threats to his authority. He considered it imperative to bring these elements nearer to the seat of power under close eyes which would make it easier to control them under close quarters. This was seen necessary to elicit their allegiance and bring them under submission. The *Khalifa's* policy of enforced migration, was however, met with vehement wide popular resistance from the majority of *Kordofan* tribes. The tribes openly rejected the call for migration and were reluctant to leave their homelands, and openly defied the *Mahdist* orders. This open resistance impelled the *Khalifa* to order his Amirs to the use of force to see it carried out. The policy met with formidable obstacles in its implementation, and eventually turned into an open conflict between the *Khalifa's* forces under his Amirs and the general subjects. This had led to virtual wars to bring, once more, under the state authority most of the Arab tribes and the *Nuba*, and to suppress a rebellion of the *Jihadia*, the *Khalifa's* own conscripts. Punitive expeditions continued throughout the *Mahdist* period against the truculent and rebellious *Nuba* Mountain *Meks* and other tribes; especially the *Kababish* of Northern *Kordofan* and the *Gimma* in the south-east. More drastic devastation of the region occurred towards the latter years of the *Mahdia* when in 1897, the *Khalifa* issued his orders summoning the tribes to gather at *Omdurman* to enlarge his armies against the approaching Anglo-Egyptian forces. The Amir *Mahmud*, Amir of Western Sudan (*Kordofan* and *DarFur*) "marching from *DarFur* to the Nile, swept across the province driving men, women and children before the extended detachment of his army, who, to render desertion impossible, destroyed every village and settlement as they passed and left a wake of utter desolation in their train" (Ibid. 1912: 89). *Dar Hamid* and *Dar Hamar* were among *Kordofan* tribes who joined the *Mahdist* forces in *Kordofan*, and later in *Omdurman*. The collapse of the *Mahdist* state by the invading Anglo-Egyptian forces in 1898 gave them the opportunity to break away from the forced settlement in *Omdurman*, and they returned to their homelands in central *Kordofan*. Unfortunately for the *Hamar*, the *Mahdist* years were a period of utter misfortune, in which they lost their former wealth of camel herds.

3- 2- *KORDOFAN* NATURAL SETTING:

Kordofan region lies approximately between 9° N and 16° N lat., and between 27° 30'E and 32° 15'E long. The region extends about 400 miles from North to South, and about 350 miles from East to West. It covers an area of about 130,500 square miles. It extends northwards into the Saharan Desert and southwards into the rich savannah zone of the tropics. There is considerable disagreement as to the origins of the name *Kordofan*. It is possible that the name *Kordofan* is Nubian in origin as the *Nuba* were

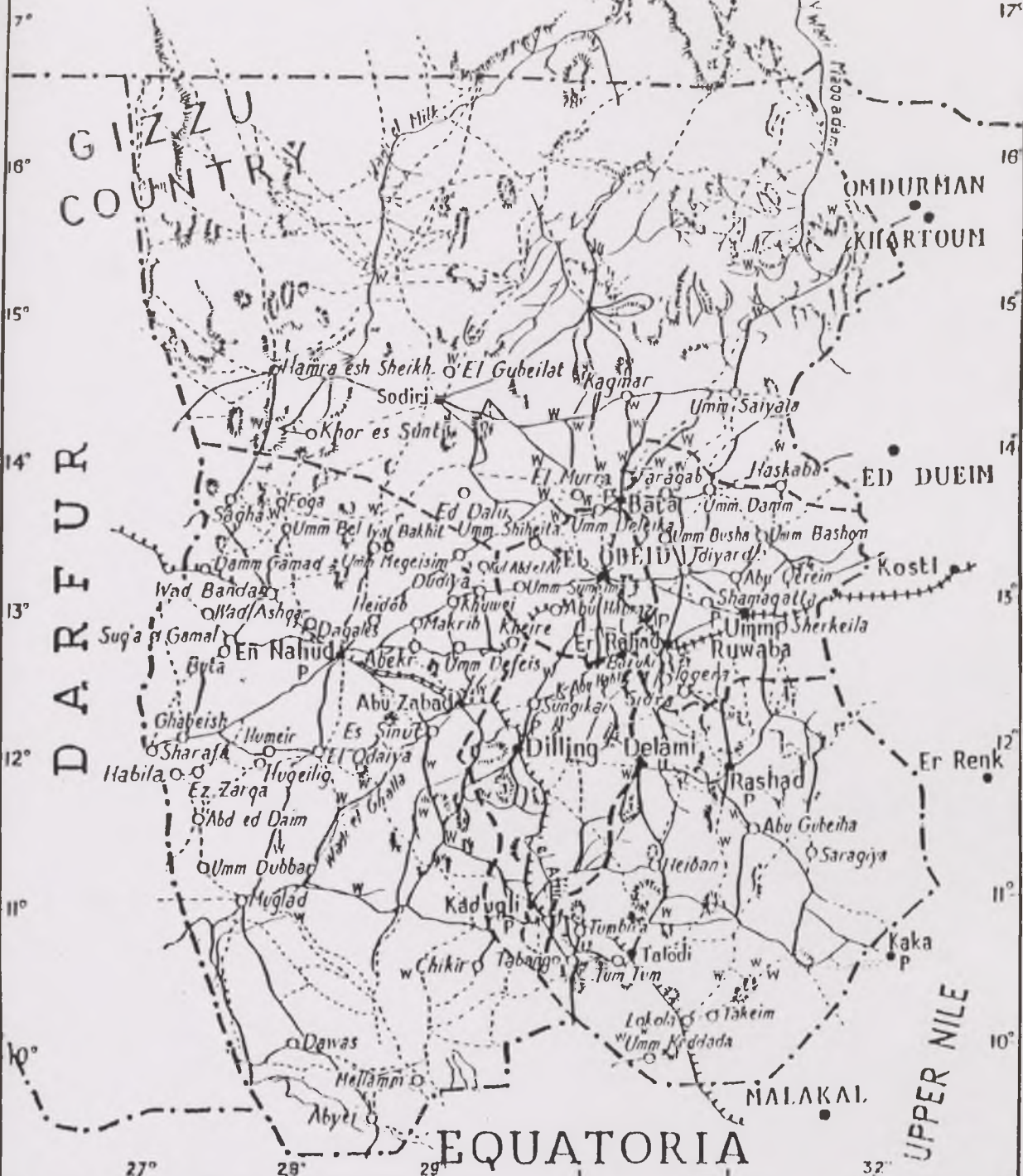
the earliest to inhabit and rule *Kordofan*. Their last king was said to have lived in *Jebel Kordofan*, some few miles to the south of *El-Obeid*. It is now commonly agreed that the country derived its name from and named after *Jebel Kordofan* (Mac Michael 1967a).

3- 2- 1- Climate and Rainfall:

North *Kordofan* lies within two climatic zones. The Northern parts of the region North of lat. 14° N lie within the tropical continental desert climate which has a mean annual rainfall of less than 200 mm, and a wet season of about one to three weeks a year. This climatic zone is suitable only for pastoralism. South to this zone to 12° N lat., lies the region of the tropical semi-desert climate, with a mean annual rainfall between 200 - 500 mm, and a rainy season of between 2 - 3 months. In this climatic zone agropastoralism prevails, with wide-spread dry farming predominates. The rainfall in this zone is characterised by high variability, inter-annual and inter-seasonal fluctuations, which makes harvests very unreliable and subject to frequent failures. This zone is succeeded by the tropical sub-humid climate, which is more characteristic of Southern *Kordofan*. In addition to the seasonal and annual variability characteristic of the semi-arid climate, climatologists have noted a secular decline in rainfall trends in this zone, during this century and for the longer run (Walsh 1991). As part of the Sahelian zone, this semi-arid region of *Kordofan* has witnessed a secular decline in annual rainfall, particularly since 1965 (Trilsbach and Hulme 1984).; and that this decline has continued and intensified in the 1980s (Walsh 1988), and in the 1990s.

Climatologists have distinguished three distinct rainfall phases in this region: a rather dry period during the first two decades of this century, followed by a wet phase from around 1920 to the early 1960s, with particularly wet conditions in the 1920s and 1930s; and a very dry phase from about 1965 which persisted until the present time. The recent decline has been noted to be part of a general secular downward trend throughout the Sahel of Sub-Saharan Africa, and other parts of the continent. Accordingly, rainfall trends in *Kordofan* and central Sudan shows a corresponding downward pattern. A comparison between the rain maps of the 1920 - 1939 wet phase with those of the 1965-present dry phase, reveals that the 200 mm and the 300 mm isohyets have retreated southwards some 120 km. As a result, the semi-arid and sub-humid belts have moved southwards (Walsh 1991). This implies that the region is undergoing drier conditions. Historical accounts point to a series of dry spells of approximately equal intensity comparable to the current one, occurred in 1680, in 1740 - 60, 1820 - 40, 1895 - 1920, and a long dry period in AD 1150 - 1500 (Walsh 1991: 39). It appears that the mid-twentieth century wet phase is rather an exception than the rule. The drier conditions appear to be more typical of this semi-arid zone over the past thousand years (Ibid).

DESERT



MAP OF KORDOFAN PROVINCE

- Provincial Boundary
- District Boundary
- Roads
- Camel Tracks
- ~~~~~ Watercourses
- +++++ Railway
- Telegraph
- W Wells
- P Post Office

The dry conditions of the region are best suited for pastoral production. Indeed, the history and tradition of the region confirms that pastoralism had been the dominant mode of existence. People had successfully adapted their way of life to these dry conditions in accordance with the available natural resources and opportunities exploited to support animal husbandry, which in turn supported human life. It follows logically that the transformation of the pastoral way of life into sedentary agricultural labour may not have been the most rational way to promote livelihoods in such a fragile ecology. The ecological disturbances and the attendant environmental problem which have occurred in the recent history can be attributed to the adverse effects of transformation of the local systems, the alterations in production regimes and resource utilisation from an adapted pastoral system to a precarious one based on sedentary agricultural labour.

Rainfall remains a crucial factor of production and of livelihood in the region. It fluctuates widely in volume and distribution, and hence, dictates the mode of human occupation, the patterns of land use and the succession of ecological zones, and distribution of plant regimes throughout the region. The rainy season spans the period from mid-June to about mid-October. The rainfall has also been characterised by fluctuations and changes in the length, structure and reliability of the wet season, such that marked contractions in the wet season have been noted (Hulme 1987, Walsh et al 1988). These contractions have occurred mainly at the end rather than at the start of it, making rainfall particularly erratic at mid- to late season. Such breaks in rainfall cause the dry spells locally called "*sabna*". The frequency and intensity of *sabnas* have been noted to have increased greatly in recent times compared with the past when elderly people reported that such dry spells were less frequent and less intense than at present. The dry spells may be transient, spanning between one to two weeks, or may be protracted for more than two weeks, therefore are potentially damaging and retarding to the development of crops and plants; and may cause partial or complete harvest failure.

3- 2- 2- *Kordofan topography and soils:*

In topographical appearance, *Kordofan* exhibits a clear demarcation between the sandy (*Goz*) soils to the North, and the rich clay soils to the South. A neat dividing line demarcates the Northern steppes from the Southern plains. This dividing line runs obliquely from 13⁰ N lat. near the White Nile to 12 N⁰ at a point on the *Dar Fur* border. To the North of this line lies the sparse steppes plains of *Kordofan*; composed entirely of sandy soils, except for few occasional rocky outcrops rarely exceeding 600 ft above the plain. In the Northern limits of these wide plains, some depressions occur forming *Wadis* (water courses) such as *Wadi el-Milk* and the *Kheiran*. These *Wadis* run during the rains and dry up immediately afterwards, to form shallow underground water

reservoirs in which wells can be dug from depths of a few feet to depths up to 15 *Rajil* (man), of about 40 ft deep or more. These form groups of wells called "*id*" which are dug at the bed of a *chor*, whereas deeper wells called "*sania*" are dug on the banks of the *Wadi* or *chor*. The usual method of drawing water from the wells is through the "*delu*". The "*delu*"- like a bucket- is a piece of loose leather flap which is suspended by strings wound to a loop of wood. This is itself fastened to a long rope. The *delu* is lowered into the well, and when it reaches the water level at the bottom of the well, it flattens allowing water to collect in the leather bucket. Then it is drawn by the long rope up to the surface. The *Wadis* and the shallow underground water beds that they form provide valuable sources of water for humans and animals for most part of the year in this otherwise waterless region. The vegetation of this country is semi-desert low scrub, seasonal grasses, thorny bush and some trees peculiar to the region. Of these trees is the *hashab* (acacia Senegal) or the gum Arabic tree. The Northern part of *Kordofan* is the habitat of this valuable tree. The tree occupies a narrow belt that runs from West Africa to the Ethiopian border, *Kordofan* is the centre of this belt, and produces over 80% of Sudan's total production of gum. The gum trade became the backbone of the rural economy during the colonial period and induced the massive settlement of previously pastoral communities.

Another important tree is the giant *Tebeldi* (baobab or *Adensonia Digitata*) tree which has a unique history in this region. The *Tebeldi* is closely associated with the history of the *Hamar* tribe who, in a unique form of adaptive response to the aridity and waterlessness of the region, used the huge trunks of the tree as water reservoirs in which they stored rain water for the hot dry Summer months up until the next rains. The *Hamar* came in about the eighteenth century to inhabit the vast plains West of *El-Obeid* and extending into *Dar Fur* frontiers. This region was completely waterless, no *Wadis* or shallow underground water on which to depend. The *Hamar* invented, towards the end of the 18th century, the practice of hollowing cavities in the huge trunks of the *Tebeldi* trees and used them as water reservoirs. Rainwater is collected during the rains from a shallow puddle prepared at the foot of the tree, hoisted by buckets and poured into the hollowed trunk and stored to supply water for humans and animals from about November till June. The big *Tebeldi* trees can hold a water capacity of up to 50 barrels (more than a thousand gallons), with little loss from evaporation. The water thus stored is usually supplemented by the use of water melons. The *Tebeldi* trees vary in diameter from about 10 to 15 ft; and the reservoir section is about 20 ft high. Water thus stored in the *Tebeldi* trees remains sweet until the end of the rainy season, and even after a lapse of three years or more, only a slight discoloration may be noticeable. The *Tebeldi* trees represent an important form of property to the *Hamar*, which can be let or sold. In the early years of this century, it is estimated that there were at least about 200 thousand

Tebeldi trees registered in *En-Nuhud* district alone (Intelligence Report 1912; March 1948). The utilisation of the *Tebeldis* as water reservoirs in an otherwise waterless country represents one of the most magnificent examples of human adaptations to the limitations of a harsh environment, in this case water shortage. The water thus stored in the *Tebeldi* trees and water obtained from melons remain the only source of water supply for the *Hamar* from the time the rains cease until the time of the next rains. This was the water situation in *Dar Hamar* until after independence when a massive programme of digging boreholes was started to go hand in hand with and to aid the policies of sedentarisation and settlement of pastoral communities. Elimination of the problem of water shortage constituted a major pillar in the new policies, and continued to be a potent political card for politicians in rallying political support until today.

The Northern part of *Kordofan* provides an ideal habitat for camel breeding, sheep, goats and cattle. And because of its desert and semi-desert character, is strikingly similar to the Arabian Desert, and therefore, attracted many of the Arab groups who immigrated from Arabia following the conquest of Egypt by the Arabs about 651 AD. The Arab groups followed the Nile Southwards, congregated in Southern Egypt for a while and then infiltrated into Sudan from the 14th century and subsequent centuries. Arab influx into the Sudan took at least three different routes: (1) from the North; following the Nile to the *Gezira* and central Sudan, and other groups penetrated into *Kordofan* and *Dar Fur* from the Nile; (2) from the north-west, groups that came from north-west Africa, from Tunisia, Morocco and Tripoli; (3) earlier waves came across the Red Sea and Abyssinia.

This Northern part of *Kordofan* is inhabited by various Arab groups who shot across the plains of *Kordofan* from about the end of the 14th century, inter-mixed through marriage with the indigenous inhabitants, such as the *Nuba*, the *Nubians*, the *Fur*, the *Fung*, as well as with other Nilo-Saharan groups who inhabited the semi-desert country West of the Nile to the Chad Basin, such as the *Zaghawa*, the *Meidob* and *Kaja*. The people of *Kordofan* are therefore a cosmopolitan admixture of these diverse elements. In addition elements of Berber and Nilotic groups are also represented in *Kordofan* ethnology such as makes *Kordofan* a micro-cosmos of the North African continent.

To the South of the oblique line that demarcates the North sandy steppes from the Southern plains, lies the country of black clay soils in which rise the range of the *Nuba* Mountains which give the region its idiosyncratic character. These mountains consist of rugged granite masses of varying degrees of altitude; sometimes rising to upwards of 2500 ft above the plain as in *Jebal Tegeli*, and of mere hills of no more than a few hundred feet in others. The *Nuba* are ancient cultivators who cultivate the plains at the foot of their hills. These hill-foot plains are intersected by innumerable water courses during the rains which enable the local populations to grow a variety of crops, of

sorghum, sesame, groundnuts, and cotton which the British colonial administration introduced in the *Nuba* Mountains Cotton in 1928, a brand of the American short-staple of the Southern prairies. The rich black clay soil is suitable for cotton cultivation.

The region lies within the rich savannah zone. Its vegetation cover is thick bush, tall trees and thick lush grass. This, however, gradually merges into the tropical zone proper towards its Southern frontiers with the districts of Rivers of *Bahr el-Ghazal*, and *Bahr el-Arab* in the Southern region. The rich vegetation of this region attracts the Arab herders who inundate the region in their seasonal movements from the North at the end of the rainy season when the swampy pools that form here by the rains dry up and become free of flies. Many of the pastoral and nomadic groups from the Northern part of *Kordofan* spend the whole of Summer months in these Southern environs where the rich grasses and bush provide the herds with excellent grazing. The contacts between the various social groups provides a valuable nexus of interchange for mutual benefits.

The *Nuba* rear goats and some sheep both of the short-legged small-stature mountain types. They also rear sizeable cattle herds of the long-horned Zebu type. Some of the various sections of the *Baggara* Arabs, such as the *Humur*, the *Messeiriyya*, the *Rezaigat* and *Hawazma* have long co-existed with the *Nuba*, intermixed with them through marriage, as well as with the Nilotic groups such as the *Dinka* further afield. The *Baggara*, so called for the cattle-breeding pastoralism, own large herds of cattle of the Zebu type. The *Baggara*, to all probability, have infiltrated into *Kordofan* from North-West Africa through *DarFur* via *Wadai*, *Burnu* and *Kanem* of the West African Kingdoms some four or five centuries earlier. First they came into contact with the old African Kingdoms, through *DarFur* before finally settling in the western plains of *Kordofan*, the plains providing vast grazing land for their large herds of cattle.

The constant movements of these various groups is one way of the adaptations to exploit the opportunities afforded by the different vegetation regimes and ecological zones. The contacts resulting from constant social mobility between the different social groups provided various forms of complementarities and interchange of mutual benefits between the pastoral communities and their farming neighbours. Though these forms of co-habitation and adaptations have evolved through a long historical process of tensions and conflicts between groups; this process thus ridden with tensions and conflicts, has nonetheless been hegemonising, such that eventually a form of a status-quo prevailed in which all partners engaged came to realise the mutual benefits which can be attained from co-habitation and peaceful co-existence. Accordingly, set rules of practice and norms governing the behaviour of the tribal groups concerned have been set in force and mutually observed. As a result of such a recognition, a certain measure of peace and stability prevailed, achieved through a consensus recognition of the necessity of sharing the available resources, and the mutual observance of the rights of the other co-sharer

groups. Trading is also made to thrive, as other more permanent forms of social interchange; i.e. of intermarriages and friendships too. These forms of social contacts and movements index complex patterns of adaptations which ultimately made it possible for higher levels of social security to be attained by all partners engaged in the mesh of the local social organisation.

3- 3- Forms of Social Adaptations to Environmental Risk:

This chapter gives a picture of communal life in *Kordofan* about the turn of the century. It takes the view that peoples living in precarious environments of the semi-arid regions (such as North *Kordofan*) adapt to the limitations of their environment by evolving production techniques and social networks designed to avert or mitigate the risks of an uncertain environment (Scott 1976; Watts 1983, 1987; Gowlett 1988; Scott 1984; Holy 1988; Prothero, 1974; Manger 1988; Widstrand 1975; Sobania 1988; Nyerges 1982, Western 1982). The character of the physical environment in the semi-arid zone has dictated the adoption of production patterns and husbandry practices well suited to the natural conditions and the availability of resources. The climate is characterised by alternating wet/dry spells that may be transient (between 1-3 years) or prolonged (2-6 or more) (Nicholson 1980, 1983, 1986; Glantz 1978, 1987). It is also characterised by extreme variability in rainfall from season to season (interseasonal) and from year to year (interannual) (Lamb 1982; Nicholson 1980, 1983, 1986, Rasmusson 1987). Interannual variation has been estimated to be between 20-30% or more (Rasmusson 1987); and spatial seasonal variability to range between 200-800 mm between regions in the Sudan/Sahel zone (Nicholson 1980). Rainfall variability in turn influences the distribution of both pastures and of crop yields, such that yields may vary considerably over very close proximities. On another plane, the interseasonality of rainfall influences both the spatial and temporal distribution of pastures (Sandford 1982) which in effect determines the seasonal movements of herds from North to South in accordance with the seasonal availability of pastures and water.

Adaptations can be seen as sets of functionally evolved production and resource management systems and social institutions developed in response to the constraints and opportunities of a given environment and aimed at securing individual survival and social reproduction. Adaptations are expressions of a general way of life, of the structures of a society's culture, morality, its ideology and world view. The discussion here presents a picture of the adaptations of *Kordofan* indigenous communities to the opportunities and constraints of their physical environment and their resource management systems. Adaptations and indigenous resource management systems and

knowledge are presented not as antithetical alternatives to conventional development planning, but as a viable option to be considered in resource management and rural planning. Development planning can learn a great deal from understanding the practices and rationality of indigenous systems, and a synthesis between the two can go a long way towards addressing many of the problems associated with natural resource and environmental degradation. A case in point is the coping strategies and mechanisms people employ to deal with problems of food shortage in these semi-arid environments, which have proved more effective and life-saving than all the relief packages combined. The following discussion centres on the adaptability of both the production systems and social institutions to the conditions of the environment, and how these systems and institutions revolve around survival insurance.

3- 4- INDIGENOUS KNOWLEDGE AND RESOURCE MANAGEMENT SYSTEMS:

The village communities in *Kordofan*, have systems of knowledge and practice that are varied, diverse and extremely complex. The essential function of these various and complex systems is to ensure families, households and communities of the subsistence needs necessary both for individual survival and social reproduction in the contexts of resource scarcities. The common thread, obviously, is that the group as a whole has some abiding interest in survival, in cohesion, in the benefits and costs attendant to a particular use regime, and in economising on perceived scarcities. The range of means which rural populations employ for subsistence, to maintain their livelihoods and to cope with uncertainties, is impressive (Chambers 1989). The recognition of the merits of indigenous systems invalidates conventionally held views about "primitive" "backward" "native" cultures. The inherently grave dangers that such perceptions practically entail can largely account for the ills that have bedevilled African traditional communities, and can indeed be attributed, in part, to the ill-advised policies and development strategies based on such erroneous conceptualisations of indigenous systems. Many indigenous communities have long recognised the need for environmental sustainability and judicious conservatory resource use, and contemporary societies have much to learn from them (Redclift and Sage 1994; Dai 1993; Bean 1992; Berkes 1989; Richards 1985; Lino and Berkes 1989). The permanent threat of the depletion of non-renewable resources, and the dangers that this entails as the energy crises, for example, of the 1970s and 1980s so forcefully exposed, makes the imperative demand of seeking alternative ways of sustainable resource use. In this context, traditional methods of resource use and management stand as a viable option for policy-making to consider, not least because these systems have been test-proven and managed to support local communities for millennia. The simple fact that these indigenous systems of resource use have been capable of maintaining livelihoods and reproducing

the social systems without damaging natural habitats, endangering other biotic species or depleting their natural resource base, commends the rationality of indigenous management systems to encourage others to look into their in-built capacities that made them self-regenerating.

Among *Kordofan* communities resources used to be managed communally; access to resources was defined by rules of practice; of rights and duties to be observed. The functional value of such rules was to keep the community maintained within the limits of the biological opportunities available in their environment; a recognition on the part of the community that all members have an abiding interest to observe such rules of practice. This strict balance between community and its natural resource base explains much of traditional communities' attitudes of exclusion and defence of their common resources against other seekers. This explains the constant state of warfare between the various groups inhabiting these regions when access to the communal resource was a privilege of community members. Communal resources have never been open-access property, but remained strictly under community control and regulatory rules. Communal ownership of resources and the rules of governance acted as safe-guards against abuse. It is only recently, under centralised state's land reform policies, that communal resource management has been replaced by open-access arrangements designed to speed up the development process and exploitation of natural resources. The change has been largely induced by external pressures in the drive to bring rural economies under the control of the state, the market and capital. This has coincided with the period of rapid economic transformation and social change under the forces of colonialism, the rise of capitalism, commercialisation of subsistence resources into export staples and the development of technology for increasingly more efficient exploitation (Berkes 1985; Grima Lino and Berkes 1989). The result is that as resources get scarcer, developers and commercialists push their operations further into remoter areas for profitable extraction of natural resources in what is termed "sequential development". Sequential development follows a predictable trend of expanding operations from the more accessible to the less accessible areas, and from the more valuable to the less valuable species. Area after area and stock after stock are being depleted in the course a "sequential development" of natural resources (Ibid: 50).

3- 5- Pastroralism in *Kordofan*:

The major part of *Kordofan* lies within the rain-deficient zone (below 500 mm). Consequently, its development potential lies more in livestock raising than with agricultural farming. The soils in most parts of the Northern regions are not suited for anything other than grazing. Added to this is the absence of any local alternative avenues of either employment or investment. and as such pastoralism remains the only

viable way of the livelihood for most people. Moreover, pastoralism requires very little capital investment compared to agriculture. Animal husbandry in *Kordofan* is an old practice probably started by the introduction of cattle from the Nile or from North West Africa in early times. However, present-day *Kordofan* hosts about 8 - 10 million heads of animals; cattle, sheep, camels and goats of Sudan's 55 million total animal wealth. The major concentration of cattle is in southern *Kordofan*. The *Baggara* cattle belong to the major grouping classed as North Sudan Zebu (Welson 1991). This section deals with animal husbandry as a socio-economic practice and how it has been managed and adapted to the conditions of the local environment in the quest of maintaining the highest level of security and social reproduction in the semi-arid region of *Kordofan*.

Pastoralism as a form of economic activity is ultimately governed by the two basic necessities of pasture and water. The spatial distribution of these two basic resources is in turn determined by seasonal climatic changes and the concomitant variations in the physical environmental conditions. Resources of pasture and water tend to be unevenly distributed across geographical areas of pastoral production. As a result, and in order to maximise the economic utility of the two resources, pastoral movements become the most rational practice in pastoral production. Moreover, the uneven distribution of the resources of pasture and water in geographical space in turn determines the composition of herds in terms of size and mix since different types of animals have different dietary needs and feeding habits hence exploit different types of grass and plant species. Cattle, for example, subsist mainly on grass and require frequent watering; therefore are confined mainly to regions of grassland with adequate water supply. Camels, on the other hand, subsist mainly on browsing and water on far less frequent intervals than the other types of animals. Sheep and goats graze on both grass and browse of trees and bushes. These factors concerning dietary needs and feeding habits of animals influence the way herders compose their herds in mixtures for the optimal exploitation of the available resources. They also determine the size of herds and the pace of pastoral movements in accordance with the ratio with which the grazing and water resources become exhausted by the herds.

3- 5- 1- Maximising Productivity: Mixing Herds:

Herds vary in size, mix, and male/female ratios. A camel herd, for example, can be of fifty heads and can reach up to three hundred or more. Herds of sheep can be of about 2 or three hundred up to three or five thousand or more. Cattle herds can range from a hundred to three thousand heads. This is only an arbitrary estimation for there is no fixed number, nor a criteria by which to determine herd size.. However, it is customary to understand herd size as one that makes a viable unit of production and reproduction;

in the sense of maintaining its own costs and those of the household unit dependent on it.

In the arid and semi-arid environments where resources are meagre, mixing the herds is a sound adaptive husbandry practice among the stock breeders. It offers an ideal form of resource management maximising the returns from the land and minimising the labour costs. Moreover, it is environmentally sound since mixed herds exert selective grazing on the different grass and plant species over wide areas, thereby reducing the pressure on the land and the grass cover and positively contributing to the biotic diversity. Mixing herds is therefore an ideal form of adaptation to the conditions of the environment. It is almost always the case that herds are mixed. Seldom do we find herds that are composed of only one type of animal. North *Kordofan* tribes usually rear camels, sheep, and goats together, and a few donkeys as burden animals. The mixing of herds is an old tradition in the animal husbandry practice in these environments. The practice of rearing mixed herds is locally denoted by a metaphor "*Jamaat al-Sufa*"; which means the mixing of different wool strands, a metaphoric expression meaning different animal types. Herders have long realised the great advantages of mixing herds. They tell that mixed herds is a high security measure against loss at times of disasters, such as droughts, diseases and epidemics; such that if one type of animals is decimated the other type(s) could survive the disaster and save the family from total loss and consequent poverty and neediness. It is this practice that has proved one of the most effective mechanisms in saving lives in the recent famines in 1983-85 and 1990-91. Many households in the severely affected regions in Northern *Kordofan* were able to survive the famine years by reliance on all three different types of animals. It is only those poorer households who may have only one type of animal to rely on, and especially the smaller stock, of sheep or goats, who suffered the worst effects of famine, and associated consequences of dislocation and possible loss of life.

Herd mixing, however, is a very sound practice of high environmental and management significance. Environmentally, different types of animals exploit different types of grass and plant species, therefore relieves the pressure on the land and plant cover by selective grazing. This maintains the biotic diversity of the ecosystem, than otherwise if herds are not mixed in which case the unitary-type animal grazing on preferred grass(es) would endanger that selected grass species. This is highly significant in maintaining the ecological balance. Mixed herds also disperses the pressure on the land and the grass cover, such that the grazing is distributed over a wide range of biotic regimes, and over wide locale in the vast expanses which animals traverse in their constant movements. From a management point of view, mixed herds has other advantages. First, it allows optimal exploitation of the available natural resource, especially pastures. Different types of animals can graze on different types of grass and

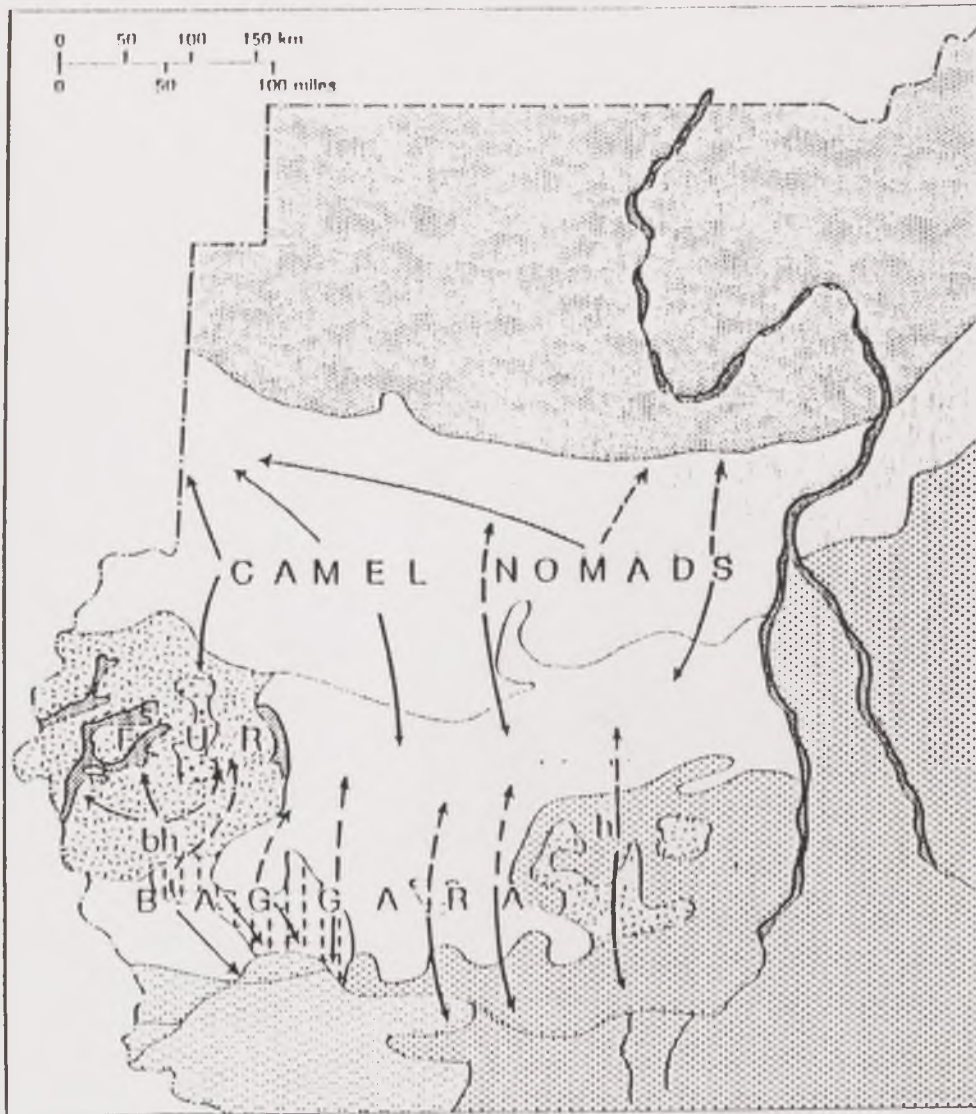
plant in the same locality according to animal selection of favoured grasses, thereby maximising the returns from the land. It is also economically sound as it affords the maximum possible exploitation of the available resources with minimal labour cost, since different types of animals are tended together in the same area, thus reducing the labour inputs and costs than if they are tended separately.

Mixed herds, composed of big animals such as camels and cattle, and smaller stock like sheep and goats, are also suitable for different marketing criteria and according to needs. For small household needs and petty expenses, one or two of the smaller animals would suffice to take to the nearest market for sale. A small shortage in the household food provisions would take three or more of the small animals to fill the temporary shortage. Larger animals are usually reserved for more demanding purposes and bigger needs. Of the occasions which would require the sale of larger animals is marriage and the procurement of the household food grain stocks required for part of the year. Larger animals are also sold for the purposes of trade either in animals of younger age or for other trading activities (Field-work data 1993). A mixed herd, therefore, is more economically convenient in meeting such various needs and purposes without dangerously upsetting the economic viability of the herds if otherwise animals are to be drawn for sale indiscriminately to meet petty and important household needs from a herd composed, say of cattle only. In a mixed herd, smaller animals can be taken handy to the nearest market place whenever an urgent need arises. The sale of bigger animals will have to be carefully considered by the family over time. The animals will then be driven to the most prospective markets for sale. Because animals represent the preserved wealth of the family, a mixed herd is a mechanism whereby the family wealth can be managed more judiciously and meticulously by selling out proportionately according to need. This would guard against squandering the family wealth if the herd is composed, say of only larger animals in which case the proportionality between need and sale would not be tenable.

3- 5- 2- Mobility: The Pastoralist Cycle:

The physical conditions of North *Kordofan* semi-arid environment are ideally suited for the pastoral production. The tribal communities inhabiting North *Kordofan*, including the *Hamar* and *Dar Hamid* groups, and others like the *Kababish*, the *Beni Gerrar*, *Kawahla*, *Shanabla*, etc.. were originally pastoralists rearing mainly camels, and smaller stock like sheep and goats. They inhabited these drier parts of *Kordofan* since they infiltrated these environs from the North and North-west towards the end of the 14th century onwards. Their pastoral life style, and their long experience of life in the dry conditions in the North African Desert and the Arabian dry lands, whence they first came, found the semi-desert conditions of *Kordofan* more suited to their original

Pastoral Movements in Western Sudan



- | | | | |
|-------------|--------------------------------|-------------------------|-----------------------|
| Desert | Stabilized sand qoz | Archean outcrops | Montane soils |
| Semi desert | Stabilized sand Baggara Catena | Dry season migrations | Alluvial soils |
| Clay plain | Latosols | Rainy season migrations | Bh Bent Helba Baggara |
| | | | h Hawzma Baggara |

way of life. Camels and the smaller stock which they reared are, most adapted to the dry conditions. The huge expanses of the countryside, with varied micro-environments, the gradient succession of climatic zones from absolute desert, semi-desert and savannah conditions offering diverse plant and grass regimes, made it possible for these groups to maintain their pastoral way of life moving from one place to the other in pursuit of fodder and water according to the cycle of seasons. They move from North to South and from South to North as the needs of animals for fodder and water necessitate. The North-South movement, Known as "*Moutah*", starts from the Northern parts as these become dry by the end of the rainy season in about October. They continue moving Southwards stopping for brief intervals at watering points to exploit the available water and fodder. This movement continues on a slow-measured pace and takes about two to three months, until by about February and March, they reach the rich Savannah grasslands in Southern *Kordofan* and the region of the rivers (tributaries of the White Nile) which by this time run dry and free of the disease-transmitting tsetse flies (Field-work data 1993). These Southern environments of the Savannah, remain rich in grass and browse and support the herds for the whole months of the hot dry Summer. The pastoralists settle briefly during these Summer months scattered throughout the semi-desert and Savannah belt in small encampments. These brief settlements are called "*Dammar*", meaning "Summer camping". Frequent movements as an idiosyncratic characteristic of pastoralism, require that in order for households to move with the herds swiftly and with ease, there must be few possessions to carry about. And the few possessions that the nomad household owns are carried on the backs of animals. Therefore, the accumulation of material possessions becomes an unnecessary encumbrance. The encampments, therefore are simple dwellings made up of pitched tents made chiefly of mats woven from animal wool. In the encampments remain the family, which as a general rule is remarkably smaller in size than the sedentary family. The women and children are left in the camp; the women take care of the household, the children tending the smaller stock around the camp while the adult males go with the herds further afield and come to the camp only occasionally (Field-work data 1993). Therefore, there are long periods of separation between the man and the woman which functions as a mechanism of family control, which to a large extent explains why nomad families are much smaller in size than sedentary ones. This in turn is a basic adaptive behaviour whose function is to suit a way of life that is constantly on the move. A smaller family is more convenient to move from one place to the other as nomadic life requires, and easy to support in terms of the scarce supplies of water and food which need to be constantly fetched from local markets, and not without considerable effort and travelling. The economic viability of the household and its reproduction depends on a strict division of labour between its members. The women take complete

responsibility of the household affairs, from weaving the tent mats and pitching the tent, to tanning skins, making seamless skin water containers, to fetching water and doing the marketing, besides the daily chores of the household of food preparation, child care and additionally helping with tending some of the smaller animals kept in the camp (mainly the kids and the sick of animals). The adult males, on the other hand, take complete responsibility over the duties of tending the main herds, following the distant grazing and watering opportunities, selling and buying of animals, and undertaking the purchase of the necessary household effects such as clothes, food and medicine, guns and ammunition for protection. The children tend the smaller animals around the camp. As they grow older, they gradually participate in tending the main herd, relieving in brief intervals the adult males in their occasional visits to the camp and when reaching adulthood, they become fully involved in the main activity of the males, which is the full-time engagement in tending the main herd. As the children become adults, they continue working, as members of the extended family, under the control of the father, who, with advancing age, delegates the responsibilities of the herd to his sons under his supervision. At marriage, the daughters move to live with the families of the in-laws, while the married sons and their offspring remain with the original family; thus the family gets larger, but nearly always wealthier in the course of time. The size of the family and the degree of animal wealth in fact grow proportionately over time, often during the life span of the big father. This would normally continue until the death of the father, after which the brothers and sisters would either continue as one family unit as before, or they could split each taking his/her portion of the inheritance, thus forming other family units, though strongly related as cousins and kins (Field-work data 1993).

It is important to stress that the pastoral family stands as a basic autonomous economic unit, within the wider context of the clan and tribal nexus. There are certain redistributive mechanisms to ensure that no member of the community is left behind for want of animals or food. Therefore, in as much as animals represent the main source of family capital wealth, the occasions of marriage contracts and inheritance represent divisions and forms of redistribution of capital. It is common among wealthy herd owners to contract plural marriages which requires giving out some of the animals as bride wealth and slaughter for feasting. Plural marriages naturally add to the family size. The marriage of the sons also requires further division of the animals capital wealth. On the other hand, the marriage of the daughters and sisters, especially of a poorer household, will add significantly to the animal wealth of their father through the mechanism of bridewealth paid at their weddings. As a general rule, a man pays the bridewealth of his wife according to his wealth, therefore marriage contracted between poorer and wealthier families generally have a strong redistributive effect. Redistribution is also enhanced by the fact that bridewealth is as a rule made up of a

large number of contributions and is ultimately divided among a large number of recipients, and relatives at both ends of the marriage contract are involved as contributors and recipients. By the death of the father the inheritance (usually in animals) is distributed among the sons and daughters of the deceased man, if they so wished, a son taking twice as much as a daughter's according to Islamic laws of inheritance. These forms of capital divisions represent mechanisms of redistribution among the community members. Other forms of redistribution are expressed in occasions of gifts-giving at marriages, circumcision, Haj, hosting, feasting, and giving out to kins, relatives, and the needy. Thus the reproduction of the autonomous nomad household unit could thus be maintained, among other things, by certain mechanisms of adaptations, by forms of redistribution, by a controlled family size that grows proportionately with the increase in the family's animal wealth, by strict division of labour between its members, and by optimal exploitation of the available natural resources, notably of fodder and water (Field-work data 1993).

There is another movement from South to North which starts with the early rains in the Southern regions about June. These Southerly regions, are of black clay soils which become swampy by the rains, and pools of muddy water form and become the breeding grounds for insects and tsetse flies. The pastoralists move with their herds Northwards to escape this swampy fly-infested regions, as also to exploit the fresh grass, shoots and twigs of trees that by this time sprout by the rains in the Northern regions. This Northwards journey is called "*Nushuq*". The journey continues throughout the rainy season from about the beginning of July to mid-October, in which the pastoralists reach as far North as the desert fringe. During this rainy season, the pastoralists move their herds to the semi-arid region on the Southern desert fringe to feed on the grasses and pastures that grow in these wide expanses of land (Field-work data 1993). The general climate conditions are ideal, for the weather is generally benign and healthy for human and animal. The pastoral way of life that had existed in Northern *Kordofan* semi-arid regions had been synchronised with the opportunities and constraints of the arid environment, exploiting the available natural resources in seasonal movements from North to South and from South to North. Both humans and animals are adapted to the harsh natural conditions.

3- 5- 3- Pasture resource management:

Diverse species of flora grow in this semi-desert region during the rains forming valuable pasture which is communally managed. Pasture and rangelands are commonly shared by group members, and rules and codes of practice regulate the utilisation of the common resources to ensure members' access to them with minimum friction, but more importantly to keep the resource in a sustainable productive shape lest some vital

species be lost if otherwise codes of practice are infringed. Common property rules of practice among pastoral communities may include the enforcement of periodic closure of pasture in a rotational cycle intended to allow for regeneration (Dani et al 1987). Tribal taxation system and social expenditure may also be imposed to reduce the size of herds as they approach critical limits (Gibbs and Bromley 1989). Types of livestock may also be regulated; such as the preference of certain animal type over another as a conservation measure to ensure the survival of certain desired grasses if these were endangered by the selective grazing of a particular animal type. There are sanctions in the forms of fines and social censorship that can be exercised to enforce the functioning of such rules.

3- 5- 4- Land and water resource management:

The notion of land ownership in traditional communities acquires important cultural connotations that make the concept fundamentally different from its common uses in modern development literature. Land "ownership" in traditional communities emphasises an intimate organic relationship between the human society and the natural environment in which land is regarded as the mainstay and defining character of the identity of the social group. The notion of land ownership embraces an interrelationship between physical, social and cultural dimensions, and encompasses the land-water area and its plants, animals, soils, and other natural resources and relates that to the human occupants living on it with their traditions, customs, beliefs, values and institutions (Baines 1989). This offers a different world view, that is holistic encompassing the physical, spiritual, mental, and intellectual development of the individual self and the interrelationship between the individual being and the social world with the earth and the natural world. It is a world view which emphasises survival through co-operation and unity with the earth (Dei 1993). As Bonnemaïson has observed on the notion of land "ownership":

custom land is not only the site of production but it is the mainstay of a vision of the world. Land is at the heart of the operation of the cultural system ... Each man must have some place, some land which belongs to him, which is his territory. If he does not control any land, he has no roots, status or power. In the most extreme cases this means he is denied social existence (Bonnemaïson 1984; cited in Baines 1989: 275).

Land in this sense is associated with the cultural identity and existence of the group. This implies a notion of identity and existence, rather than of possession or domination. In effect, this negates the conception of land as a commodity or a factor of production which can be sold, transacted or exchanged. The community leaders and elders were responsible for the allocation of resources, for bringing new resources into production,

the adjudication of disputes and setting dates for important ceremonial activities beginning or ending the planting, sowing, harvesting or collection seasons. Such custodians in the utilisation of natural resources are invariably vested on the ancestral lineage who allocate resources according to the principle of equity of access to all community members.

3- 5- 5- Contacts with other Groups:

In their movements, the nomad tribes of Northern *Kordofan* come into contact with various settled and unsettled groups. The settled groups with whom they come into contact include the *Bederyyia* and the *Gawamaa*, in central *Kordofan*, and the *Nuba* who inhabit the Mountains of southern *Kordofan*. They also come into contact with other nomad groups; i.e. the *Baggara* Arabs; the *Baggara* literally meaning the "cattle herders". In the contacts between these groups, diverse forms of mutual exchanges take place (Field-work data 1993). With the settled groups, exchange is essentially of grains exchanged for cash or animals, as the settled groups are traditional cultivators of food grains. Contacts were rife with conflicts and animosities between groups as slave raiding was rampant. The nomads engaged in slave raiding, and traded with Egyptian, Turkish and European slave traders. As for their relationship with the other nomadic groups of the *Baggara*, there was low-level exchange of benefits because as both groups are nomadic, there is little complementarity between them. Indeed, in many respects, the relationship between the camelmens and the cattle herders is characterised by competition over the scant resources of water and pasture.

3- 5- 6- Herbage, Grasses and Water (Knowledge of the local botany):

Herders are extremely knowledgeable about the characteristics of the diverse grass and herbage species in the local environment. They know the nutritional value of grasses which enhance the animals general good health, and those which contribute to increase milk yield, fat and protein contents. These in turn determine the survival rates of the kids and calves. These characteristics also involve a knowledge about the toxic nature of certain plants and grasses, as well as the medicinal value of others. This knowledge extends to include what characteristics plant life has at different stages in their growth cycle, such that certain grasses are high value pastures at the beginning of their growth period. when they are young and fresh, but turn sour and of low nutritional value as they reach maturity and flowering age, and vice versa.

The acacia species are well praised by herders for their nutritional and medicinal value, especially for camels. It is regarded that acacia leaves greatly enhance the animals general good health, and enhances the immune system generally, therefore enhances resistance and reduces the possibility of diseases and helps the animals ' digestive

system rid itself of worms. However, the high value of the acacia to the animals strongly militates with the other main value of the acacia as the source of gum, thus brings to the fore endless direct confrontation and disputes between the animal herders and gum collectors who own the acacia gardens. The grazing of animals on the acacia tree can prove disastrous on the productivity and indeed survival of the tree. In the areas where the field work study has been carried out, the owners of the acacia gardens bitterly complain about the pernicious effects of animal grazing on the acacia trees, especially camels, which is more damaging to the tree than that of sheep and goats. Camels particularly cherish to graze on the young tender shoots of the acacia borroughs as they shoot out just on the first showers of rain that mark the beginning of the rainy season. These young shoots, in fact, make up the life sap of the tree as they become the basis of the tree's food metabolism system through the photosynthetic process. At this crucial stage, and after long months of dormancy during the long dry Summer season, the tree becomes dry and barren. Just at the start of the rains, the young branches shoot out green to lead the process of synthesising food for the tree. If at this crucial stage the young green branches were cut off or eaten away, the food synthesis process would be disrupted, and the future of the tree's survival is at stake.

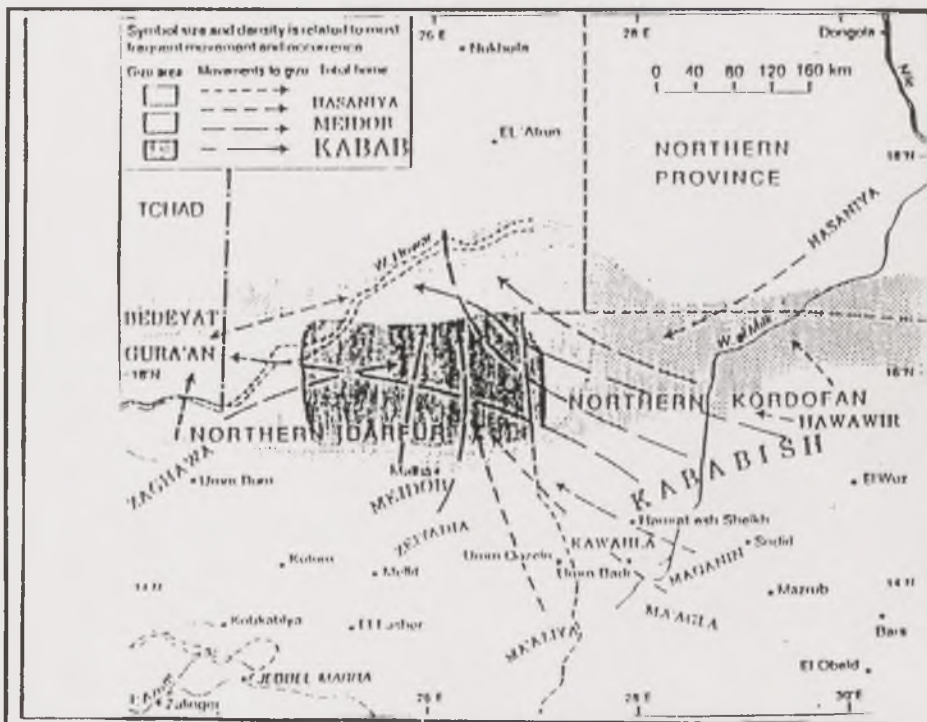
This grave danger is precisely what camels inflict by grazing on the tree's young branches. In *Al-Saata* area of Northern *Kordofan*, extensive tracts of acacia gardens stand idle, and ceased producing any gum since the beginning of the 1980s; and people have ceased tapping the trees because they no longer produce. Worst still, the local people reported that the majority of the acacia trees had already fallen, one factor reported is camels grazing. This is understandable since the disruption to the food synthetic process year after year is found to render the trees barren and eventually fall. However, grazing of smaller animals like sheep and goats on the acacia is not as bad, and indeed is sometimes considered beneficial. Sheep browse on the leaves and nuts (seeds) of the tree, therefore, are harmless to the development of the tree. Goats, on the other hand, in addition to browsing the acacia leaves and nuts, have especially an insatiable appetite and avidity for the gum itself; and can eat of it unto death. Mild browsing of goats on the lower twigs of the tree is regarded as beneficial and stimulates the tree's shoots. Herders knowledge of the local botany includes the appreciation of certain grasses for their contribution to animals general health, on the quality and quantity of milk yield, as well as their medicinal value. One particular group of grasses commonly known by the "*Gizzu*" is highly valued by herders. The importance of the *Gizzu* qualifies for a short note here.

3- 5- 7- The Gizzu

The *Gizzu* is a generic name for a group of ephemeral succulent perennial lawn-like grasses which are especially relished by the animals. The *Gizzu* is highly valued by the

by the herdsmen, and is considered the "elixir" of life for the animals. The Arabs distinguish several -about seven- different types of grass (*Sa'adan* or *Sa'ad*, *Khisheini*, *Darmah*, *Handhal*, *Kheilasan*, *Qatab*, and *Dhahayan*) which grow in the winter in the far distant deserts North and West of *Jebel Meidob*. The country of the *Gizzu* lies approximately between 15° 30' and 16° 45' N. lat.; and 25° and 29° longs.. According to the native's description, it stretches from within sight of *Jebel Meidob* to within sight of *Wadi Hawa*, sprawling some 24 thousand square miles, an area the size of England (Newbold 1912) (see figure below). The grasses remain green from the end of the rains in about September until the following April. The *Gizzu* occurs in approximately 2 out of every 5 years (Wilson 1978), and from 1917- its first chronological mention- *Gizzu* years occurred 20 times (Ibid 1991). Sometimes, as in, 1920-4, they appeared in a run of consecutive years (Newbold 1924); at other times there were none for as long as 8-10 years. The Arabs send their herds to the *Gizzu* generally about October to fatten, and remain there until the end of March when they return sleek and plump. The northwards movement to the *Gizzu* is not a casual drifting, but an organised migration demanding sufficient preparation. The main herds of camels and of sheep are sent to the *Gizzu* with sufficient men to look after them. The herds usually set off spreading fanwise in a Northwards movement after having their last drink given with plenty of rock salt.

Figure 2 *Gizzu* Area



Source: Newbold, D. 1924a.

This is important since the animals will subsist entirely on the grasses of the *Gizzu* and are not watered at all for the following six months or so until they return to the south in about the end of March to enjoy their first drink at *Wadi el-Melik*. The longest documented period of animals and their herders spent in the *Gizzu* without water is about eight months. A once Government Inspector noted in his diary that a large herd of camels was "just back on its wells and having its first drink since the rain ponds dried up" (Davies 1957). Horses can not be taken because of the lack of water. Donkeys can only be taken to such parts as bear the little wild melon known as "*Khandal*". The major advantage of the *Gizzu* is that it provides both feed and water, making it possible for nomads to exploit these expansive stretches of desert land for production and reproduction of the pastoral way of life. The *Gizzu* has ecological equivalents in a number of desert areas. Life on the *Gizzu* is tough, though for the nomads it is rather a "loaf". They eat *Kisra* with plenty of milk, flavouring it with certain berries to form yogurt. And those who have rifles can vary their menu from wildlife animals here, such as addra or dama gazelle, the addax, the scimitar-horned oryx, the desert cat or hare. But milk remains the main staple for the most part. Corn and water can be fetched on camel's back from far distances. The cold is particularly intense, and temperatures in the desert at night are not far above freezing, clothes are scanty, and the desert bitter winter winds add to the discomfort. The pastoralists consider the cold the only real hardship in the *Gizzu*, as the desert-dweller is accustomed to pangs of hunger and thirst, but cold unmans him, and he lies on himself in his sheets until the morning sun is high in the sky. The advantages of bearing this tough life is that the animals return sleek, plump and healthy. The *Gizzu* is welcomed by herd owners, and in *Gizzu* years, there is seldom friction between the tribes utilising the grazing resources in the region.

Another grass particularly relished by animals is the "*Blepharis limarifolia*" locally named "*Beqail*". The grass is held to have positive health effects on the animals and greatly increases the quality and quantity of milk, with high protein and fat content, which in turn ensures high probability survival rates for the lactating kids and calves. It is held by herders that animals feeding on this grass will be immune from certain diseases, especially from some dangerous skin diseases. It also adds positively to the dietary regime of the owning household from the milk intake.

Another aspect of herders knowledge pertains to the animals' requirements of water. They know that different animals have different watering requirements, at different times of seasons. Camels are well known for their hardiness and endurance in resisting thirst, and can withstand thirst for very long periods sometimes extending for whole months. Animals' watering periods vary according to season and type of animal. The watering period is estimated by the herder to be the time lapse that the animals can go without water optimally without doing them harm. During the cool months of Autumn

and Winter, the time interval between waterings gets longer; and shorter during the hot dry Summer season. Camels are the most thirst enduring of animals, and cattle and goats the least. The longest periods of watering are those of camels during the cool months of Autumn and Winter. At this time of year camels can go for as long as a month or even months (if grass is green) without watering. The shortest period is that for cattle and goats in the Summer months when they will require daily watering. Sheep are the second best thirst resistant animals after camels. They require watering on two weeks intervals during the rainy season, to about six days in Winter, to be lessened to 3-4 days in Summer. Cattle are watered on every other day during Winter and Summer, and only occasionally during the time of rains.

3- 5- 8- Social Norms Governing Utilisation of Resources:

Herders recognise the communal ownership of resources of water and pastures, and in effect the right of every member of the community to make use of these resources. Because of the potential likelihood of confrontation arising from conflicting interests as to the utilisation of water and pasture, certain communal norms have been evolved to diffuse the potential tensions of conflict and to mitigate its effects when it happens. Conflicts that arise from competition over pasture are not common, but usually involve large tribal units when they occur, and therefore can assume intertribal warfare of dangerous and bloody proportions. This is essentially because such conflicts are considered wars over land, either in the quest of pushing further a tribe's *Dar* frontiers or in defence of a homeland territorial boundaries. Such intertribal wars over land are not common, since tribes tend to recognise each other's *Dar* or homeland once it has been firmly established. Another factor is the mutual recognition that such wars can be protracted and bloody inflicting huge human loss on both parties. Therefore, mutual fears of the consequences of war curbs the drive for domination over other tribal *Dars*. The elders of the tribes usually sit to resolve such conflicts when they occur. Only rarely does the wisdom of the elders fail to come to a consensus or agreement on conflict resolution which could be binding to all parties involved. On such failure, conflict is sure to follow.

Conflicts over sources of water, on the other hand, are more frequent and more common, but tend to be low-scaled involving individual units. However, some of the social norms that have been evolved to organise the communal utilisation of water include the concession of right to watering to the first arrival at the watering point. In public watering points; e.g. wells and *Haffirs*, where water is public utility, priority is given to the first arrival if water is scarce and does not permit plurality of utilisation concurrently with others. However, if water is plentiful, and there is a number of wells, several waterers can work concurrently to water their herds. For rain water that forms in

ponds, pools and *Wadis*, the first arrival to the water reserves the place by dropping the rope-clips of his animals at the water point. Subsequent arrivals would recognise the reservation right of the first arrival who may or may not be present. It is customary among herders, especially camelmen, to follow the shadow of rains. They can predict with amazing precision where the rains fall from very far distances. They then ride their fastest racing camels to reach the place of water and reserve it before others. If, however, the rider's camel is not fast enough and is overrun, the first arrival will reserve the water pool for his herd which may be a very long distance away from the place of water. This explains the importance camelmen attach to the fast camels bred from certain breeds of particular racing qualities. When disputes over water do occur, usually between individual herders, this is commonly resolved by the elders of the two contending parties, and grievances, if happened, of death, injury or loss of animals, settled. Such social norms designed to organise the utilisation of communal resources in these regions where resources are scarce, are some of the mechanisms of survival designed to allow for the orderly exploitation of the available scarce resource.

3- 5- 9- Animals Breeds and Husbandry:

Herders have continuously sought to improve their stocks of animals, and have evolved, through long experience, certain breeds and breeding techniques. Herders breeding techniques include breed improvement which sought to improve certain qualities. The most desired qualities that herders look for in their animals and try to breed accordingly include the size of animal, bulk, colour, milk yield, resistance to disease and thirst, rates of survival of the born kids and calves. Speed is another desired quality highly valued among the camel-breeders. The *Kababish*, for example, have evolved a breed of camels of good resistance to thirst, very strong, and hardy of white skin colour, but are known to have relatively low bearing rates. Many of the camel breeders in *Kordofan* and elsewhere in Sudan, cross-breed with the *Bishariyyin* camel, which is universally acknowledged in Sudan as racing camels. The *Hamar*, on the other hand, have evolved an excellent breed of sheep, internationally acclaimed for its good taste of meat, especially for its super large size and bulk. The *Hamari* lamb now fetches a high demand mainly in the Middle Eastern market where it is preferred to many other types of lamb. The *Hamari* lamb breed has been improved over time, and now it is characterised by its large size, long big tail, its dark brown skin colour, and its capacity to increase in size to the maximum possible by natural or synthetic feeding.

3- 5- 10- Tending the Herd and the Shepherding Contract:

The herd is tended ideally by a member or members of the owning family unit. However, in many cases a shepherd(s) is hired to tend the herd, usually under the close

supervision of the owner. Herd-owning households that have become settled but still own relatively big herds usually hire shepherds to tend the herds. The hiring contract of a shepherd usually extends for a year, automatically renewable subject to both parties satisfaction, and that each party meets its obligations. The obligations on the hiring partner; i.e. the owner of the herd, is to provide the hired partner; i.e. the shepherd, with the basic necessities of food and clothing, in addition to the payment agreed upon in the contract. The wage of the shepherd is usually paid in kind in a fixed number of animals from the herd agreed upon at the time of the contract. At the moment of the agreement to the contract, he receives a ram as a gift; as a gesture of good will and blessing for the new relationship. As for the actual wage, the shepherd gets, in the case of sheep, about 10-16 lambs of different age groups to be drawn from the main herd in three terms over the year period. This share adds to his own property of animals which he usually keeps with the main herd with the expenses of watering and salt being incurred on the hirer. For camels, the shepherd gets a camel of mature age; between 6-8 years by the end of the year. For cattle, the shepherd gets a milking cow with its young calf, and sometimes up to three heifers, depending on the size of the herd and the qualities of the shepherd. Shepherding, therefore, can be a very rewarding enterprise for someone who has the ambition, but no capital or animals to start with. The shepherd with his basic necessities secured, and with little or no extra expenses, he can quickly build up his own herd. It is more often the case that shepherds thus hired end up building their own herds and in due time becoming wealthy themselves and hiring others. To all considerations, it is clear that the shepherding contract provides generous terms of employment. However, not all shepherds are successful, nor equally industrious. Indeed, herd owners for their long experiences with animal life and needs, easily distinguish between good and bad herders.

3- 5- 11- Animals Sales and Criteria for Offtake:

Mention has already been made to the conditions under which smaller and bigger animals are sold to meet specific needs and purposes. It is important to note the timing of sale of animals and its significance. Herd owners sell out in small quantities during the Winter months when prices are generally good. Paradoxically, they sell out in large numbers in the Summer months when supply is high, the market glutted and prices low. It is apparent from this paradox that the timing of sale represents a sluggish response to market incentives. This, however, does not seem to suggest that herders are irresponsive to market demand, but that their priorities for sale lie with the security rather than with the economic side of the decision. In selling out, herders are more concerned with whether or not the herd(s) will survive a long hot (and sometimes drought-ridden) dry Summer season, than with a marginal increase in animals prices. During the Winter

months, which coincide with the harvesting season, demand on animals is generally high as many of the farmers would want to buy an animal or two from the value of their agricultural produce to give them more security. But also this is a time when pastures are still plentiful and herds are far removed from the risks of shortage of fodder. This remoteness of imminent risk induces herd owners not to sell out, except for the minimum requirements. During the Summer season, on the other hand, pastures become more and more depleted, and the animals emaciated and weak, the imminent danger of high losses looms large which impels herd owners to sell out in large numbers, essentially in order to minimise their losses and to reduce the costs of trying to maintain the herd(s) by costly feeding. But this is also a time when the local people run out of cash as the harvest season recedes, and animal prices crash in consequence. This is a good opportunity for merchants to step in and monopolise the market and reduce the animal prices to the lowest possible; capitalising on the general lack of money and on the herd owners desperation to get rid of animals for fear of loss. Since herd owners tend to sell out all at one and the same time, the market becomes glutted and prices plummet. The sale of animals therefore comes out of the necessity to secure the survival of the herd by escaping loss, even with a bad bargain, than of following the economic rhythms of the market. The concern of the herd owners is therefore more with better security than with marginal economic gain provided by comparative market incentives. The rationality of such a choice may be questioned, but for the herder in these harsh environments, long-term security and survival are much more important and lasting than short-term market economic gains.

Another important aspect concerning animals offtake is the criteria on which animals are selected for sale. Herders have a specific set of criteria on which to select animals for sale. These criteria include age, sex, weakness, and the hereditary traits of animals. Older animals go out first for sale, as also the major part of mature males. Only a few of the males are left with the herd as breeding stock, the rest are sold or, if they are still too young for sale, are kept until they are mature and ready for sale. Weaker animals, and animals with certain distortions such as atrophied udders, one-eyed animals and animals with long horns are also eligible for sale. And animals with undesirable characteristics such as smallness in size, low milk yield, females of low breeding rates and unsightly skin colour are also selected for sale. This leaves the herd with a preponderant majority of healthy young females in the prime breeding age, and a few of the best breeding male stock having the desired breeding qualities. Animal offtake, in a sense, is a process of cleaning the herd to a manageable size to ensure more survival and reproduction and better chances of security. The rationality of this is that livestock represents a form of capital asset; and their maximisation a form of capital accumulation. Therefore, the tendency among herders to retain the maximum number of productive females and

healthy, good breeding quality males is a device of capital maximisation. This ensures accumulation or net investment since the herder is motivated by the desire to create more heads of animals than is being used in any given period of production. This represents a form of value added investment to the original capital asset, which is the main herd. Essentially, however, the herder's main drive is the attainment of better security and the harsh environment makes it imperative to accumulate. Although other socio-cultural motives such as prestige also count in pastoral accumulation, these can also be explained in more concrete economic terms since prestige and social status also involve fending for one's family and close kins, and the obligation for helping the poor and needy in the society; as well as the social spending involved in building social networks across neighbouring communities. In these harsh environments, prestige goes hand in hand with better security; and cultural values have strong economic bases.

3- 5- 12- Socio-economic Utility of Animals:

Since pastoral life centres largely on the animal and its welfare, so are their needs largely derived from it. Animals provide the major part of the household needs, making the pastoral household economy largely autonomous. Animals provide food, shelter, wear, and household utilities, in addition to their economic, transport and social values. The following table illustrates the various uses which the animals render their owners.

Field	Utility
<i>1- Economic</i>	<ul style="list-style-type: none"> - <i>income from sale of animals</i> - <i>selling hides and skins</i> - <i>selling clarifies butter</i> - <i>exchanging wool for goods</i> - <i>hiring animals for transport.</i>
<i>2- Food</i>	<ul style="list-style-type: none"> - <i>milk (and milk products)</i> - <i>meat</i> - <i>clarified butter.</i>
<i>3- Social</i>	<ul style="list-style-type: none"> - <i>hosting</i> - <i>social symbol</i> - <i>ceremonial (marriage, funeral etc.)</i> - <i>gifts</i> - <i>riding.</i>
<i>4- Transport</i>	<ul style="list-style-type: none"> - <i>Travel</i> - <i>carrying burden</i> - <i>transport of goods.</i>
<i>5- Wear</i>	<ul style="list-style-type: none"> - <i>leather shoes</i> - <i>leather bags.</i> - <i>wool wear.</i>
<i>6- Household Uses and Furniture</i>	<ul style="list-style-type: none"> - <i>wool tent cover (blankets)</i> - <i>seamless water containers</i> - <i>leather containers for grain</i> - <i>ropes and bed knits</i>

Animals represent the main form of wealth in pastoral communities. There existed among the communities certain social values which govern the redistribution of the animal wealth among the community members. In birth, death, circumcision, marriage, forging friendship ties animals are given out as gifts for relatives, kins and friends. These forms serve vital social and economic functions as forms of redistribution which narrow the gap between rich and poor. Giving out from one's own animal wealth suggests the existence of a surplus, and the various redistributive mechanisms enshrined in the social values are forms of utilising these surpluses to produce a greater degree of social and economic equality. In one sense, these forms of redistribution function as factors inhibiting the concentration of wealth and towards achieving higher levels of social and economic homogeneity within the community. In this way the pastoral economy could be seen as one that is equitable, resilient and basically keeps the society in equilibrium since the drive towards concentration of wealth is matched by equally powerful mechanisms of redistribution such as eliminates social and economic polarisation. It is only recently, under the motives of profit wetted by the market forces that the vitality of the redistributive mechanisms are weakened and the road towards concentration and accumulation is opened leading to social and economic differentiation between rich and poor within the rural tribal communities. The elimination of the poorer pastoral households from the pastoral community further enhances the prospects of more concentration of wealth by the richer ones since this puts the resources of pasture and water previously used by the now impoverished ones into the disposal of the richer households, therefore adding more to their accumulated animal wealth.

The autonomous nature of the pastoral household economy, complemented by local-level exchanges of needs such as food grains, tools, firearms, and cloth makes the local economy virtually autonomous. However, the rise of states, especially in the modern era, has thrown this traditional autonomy into disarray, as the local communities have been drawn into the fabric of new states and their local systems incorporated into wider systems of production and exchange.

3- 6- *Dar Hamid And Dar Hamar:*

3- 6- 1- *Dar Hamid:*

Dar Hamid is a composite tribe comprising a number of clanish groups, and the name is commonly used to include the following sections: *Ferahna*, *Nawahia*, *Gilaydat*, *Hababin*, *Awlad Akaoi*, *Meganin*, *Meramra* and *Ariffia*. Of the eight sections comprising the *Dar Hamid* confederate of tribes, the core sections who can claim the right to the title are the *Ferahna*, the *Hababin*, the *Meramra* and the

Nawahia. The *Dar Hamid* tribes trace their "nisba" or genealogy to *Hamid el Afzar*, who is a descendant of *Abdulla el Guhani*, the forefather and progenitor of the *Guhayna* tribes to whom the majority of *Kordofan* Arabs trace their *nisbas*. *Hamid el Afzar*, founder of the *Dar Hamid* lived approximately about three to five hundred years ago according to Mac Michael (1912). The commonly held story among *Dar Hamid* about their ancestry is that their forefather *Hamid* came through Egypt along the Nile and settled west of the present site of *El-Fasher* in *DarFur* at a place called *Um Dufun* where he married and begot his children. After *Hamid's* death, the "nahas", or "drum" of the tribe was held by his son *Mohammad Mermer* (commonly known by *Kirialo*), from whom the *Meramera* section of the tribe takes their name. Until about this time the *Dar Hamid* tribes were still nomads in *DarFur* and were not yet settled in villages. However, the *Fur* Sultan either got suspicious of the *Dar Hamid* tribes or wanted to more easily levy impositions on them, "gave orders to *Kirialo* to collect his scattered nomads and settle them round the capital" (Mac Michael 1912: 120). However, *Kirialo* demurred and was cast into prison. The Sultan sent out for the chief *Sheikh of Dar Hamid*, who succeeded *Kirialo*, then his nephew *Abdel Hamayd* and entrusted him with the duty to execute his previous orders of collecting the scattered sections of the tribe and settle them down, and gave him enforcements of troops to carry out the mission. *Abdel Hamayd* led these troops into *Kordofan* - then a territory under the nominal rule of the *Fur* Sultan - where many of *Dar Hamid* tribes are settled in their present sites in about the second quarter of the eighteenth century. *Abdel Hamayd* sought protection from the *Fung Mek* in *Sennar*, who were in constant rivalry with the *Furs* over *Kordofan*. The *Mek* of *Sennar*, then thought to be *Badi Abu Shiluk* welcomed *Abdel Hamayd* and offered his protection in return *Dar Hamid* pay allegiance to him and pay tribute. This was agreed to, and most of *Dar Hamid* moved from *DarFur* to their present *Dar* in Central *Kordofan*.

Dar Hamid tribes joined the *Mahdiyya*, and the head *Sheikh* of the tribe, then *Simawi wad Tumsah* was head of the tribe by the close of the *Turkiyya* and became a prominent Amir under the *Mahdi* and the *Khalifa*. He served in *Kordofan* and *DarFur* under *Othman Adam* and died a natural death in *DarFur* in 1891 (Ibid 121). However, Ruppell mentions that sections of *Dar Hamid*, including the chief tribe; the *Hababin*, with the *Maganin*, *Maalia* and *Gilaydat* have as late as 1829 fled *Kordofan* to *DarFur* under the oppression of the Turkish Governor at *El-Obeid* (Mac Michael 1912). When *Dar Hamid*

finally settled in their present *Dar* in Northern *Kordofan* many of the tribe's sections were still nomads moving with their large herds of animals, mainly camels. Indeed many of the tribe's sections are still nomadic until today such as the *Meramra* and the *Hababin*. Some sections of the tribe, such as the *Ferahna* are less nomadic, although they own large flocks and herds of animals, the *Nawahia* are also more settled. Those sections of *Dar Hamid* who are settled occupy what is considered the best land in the whole of *Kordofan*; i.e. the *Kheiran*, (sing. *Khor*) or low-lying cultivable basins that stretch from near *Shershar* North to the vicinity of *BaraSouth*. The water in these shallow basins is sufficiently near the surface to permit irrigation by "*saqia*" and "*shaduf*". The *Ferahna* section of *Dar Hamid* occupy most of the *Kheiran*, leaving a few of them to the *Hababin*, and fewer still to the *Nawahia* and the *Arifia*.

3- 6- 2- *Dar Hamar*:

The Hamar are a large but loosely connected tribe with closer affinities with the groups comprising *Dar Hamid*, the *Maalia* than with the *Gawamaa*, *Bidayriyya* in the centre or the *Baggara* groups to the South. As a tribe, the *Hamar* are of a comparatively recent formation, going to about five to seven generations back. Like most of the Arab tribes in North *Kordofan*, the *Hamar* claim descent from *Abdulla el Guhani*, and from a common progenitor, *El Ahmar* from whom they derive their name (Mac Michael 1912). Another story claims that the *Hamar* are a tribe from *Fazara* Arabs who infiltrated into *Kordofan* from Egypt and North Africa since about the thirteenth and fourteenth centuries (Yousif Fadl 1965). The story commonly held among the *Hamar* themselves is that they infiltrated into the Sudan from North Africa, in particular from a place called "*Gurri*" in Tunisia. They had been a nomadic tribe, living in *DarFur* and occupying the land around *Um Shanga* which is considered to be the early homeland of the *Hamar* in *DarFur* before they finally migrated eastwards into *Kordofan*. The tribe has three major sections the *Asakir*, the *Dagagim* and the *Ghariesiyyia*, who each claim to be independent of one another's authority. The tribe owes its greatness and organisation to the enterprise of *El Hag Munaym*, of the *Asakir* division of the tribe who lived as late as the beginning of the nineteenth century. In *DarFur*, quarrels arose between the *Hamar* and the *Maalia*, and the bulk of the *Hamar* migrated eastwards into *Kordofan*. Some settled in small villages for part of the year, but the major part of the tribe remained permanently nomadic roaming the country from *El Odaya* south to the open country north of *Um-Badir*, and as far east as *Abu Haraz*, *Um Simayma* and *Jebel Abu Sinun* in the vicinity of *El-Obeid*. As can be expected they were not welcomed by the nomad groups already laying claim to the grazing lands in these environs in central *Kordofan*. As a result, feuds sprang up between the *Hamar* on the one hand, and the *Kababish*, *Dar Hamid*, and *Ziadiyya* (who were at feud with one another), on the other. Especially, in

the outlying Northern grazing grounds between *Um-Badir* and *Um Sonayta*, far from all government authority, forays and counter-forays occurred to the very end of the Turkish regime (Mac Michael 1912).

The *Hamar* multiplied prolifically in *Kordofan* and not only did their herds of camels in the *Turkiyya* exceeded those of most other nomad tribes on the West of the Nile, but their villages also occupied extensive tracts of land extending from *DarFur* frontiers in the West to *Jebel Abu Sinun* in the vicinity of *El-Obeid* in the East. The vast wealth of camel herds owned by the *Hamar* made them the object of frequent requisitioning by the Turks for transport purposes; and in addition they were empowered to guard the *DarFur* frontier. In return, they were given a free hand to raise their tribute by sending looting expeditions to *DarFur*, and were in fact encouraged and even assisted in these raids. It was they, too, who late in the *Turkiyya* undertook the contract for the work involved in laying the telegraph line from *El-Obeid* to *El-Fasher* (Mac Michael 1912). Petherick writing in 1847, estimated that the *Hamar* could mount 2000 men, most of them in mail shirts and helmets. Pallme (1844) describes the *Hamar* as "one of the most amiable class of people in this province"; and that "I never heard of their having ill-treated or robbed any stranger, much less of their having committed murder" (Pallme 1844). Ensor, writing in 1876, says of them "the *Hamar* are the richest of all the nomads in this part of Africa, far exceeding in number the nomad portion of the *Kabbabbeesh*, and almost equally the whole of that tribe including the settlers on the banks of the Nile" (Ensor 1881). Speaking of *Hamar* wealth of camel herds, Ensor describes in March 1876 that *Um-Badir* had about 500 wells with 10,000 camels watering daily. However, the *Hamar* lost almost their entire wealth during the *Mahdiyya*, and were more than decimated in numbers. To add to their woes, as soon as the power of the *Khalifa* was broken, their old arch foes, the *Kababish*, looted most of the camels remaining to them, and as a result, the *Hamar's* former wealth vanished.

the unfortunate loss of their herds of camels during the latter days of the *Mahadiya*, coupled with the colonial policies of "pacification", prohibition of slavery, the digging of deep boreholes, the imposition of taxation and the accompanying new economic opportunities all provided the objective conditions under which the majority of the semi-nomadic *Hamar* moved to sedentary agriculture at the expense of their 19th century transhumant mode of adaptation (Ahmed 1987:).

The *Hamar* settled down, swallowing their nomadic pride, as sedentary cultivators and gum collectors in small villages dotting their extensive *Dar*. However, they still look forward to resuming their preferred mode of nomadic life.

Dar Hamar where they settled is almost waterless, lacking in natural drainage to form *Khors* as is the case with the *Kheriran* in *Dar Hamid*; the sandy steppes absorb rain water where it falls. There are a few exceptions where there are wells at *En-Nuhud*,

El-Odaya, *Um-Bel*, and *Um-Badir*. Apart from these wells sites, the *Hamar* derived their water largely from the rain water stored in the *Tebeldi* (baobab) trees which were used as water reservoirs. The herds depended largely on water melons. However, recently, the problem of water shortage in *Dar Hamar* has been largely solved by the digging of boreholes and *hafirs*. This has proved both a blessing and a curse; a blessing in that it made available permanent water supplies the year round, and a curse in that it encouraged the great increases in animal numbers, and contributed to the spread of desert-like conditions around water sites by excessive grazing and cultivation. The *Hamar* employed different modes of adaptations; settlement patterns, agricultural techniques, animal husbandry practices resource management systems which are synchronised with the conditions of the local environment.

3- 7- Production and exchange in *Kordofan* during the *Fur* and *Fung* hegemony:

The character of the production systems of these pre-capitalist societies depended on various forms of subsistence modes of production: e.g. domestic or lineage production, clientele or tributary relations, slavery and various combinations of these (Iliffe 1983: 27). The orientation of these subsistence production systems was directed primarily to domestic consumption and a degree of local-level exchange. This had been conducted through an elaborate system of weekly organised markets which existed in Western Sudan for centuries and which facilitated, on the one hand, the exchange of goods between the farming communities, and between these and the pastoral communities, while complemented one another's needs and surplus goods, on the other. The character of social relations coded in the social system: of mutual relations of reciprocity based on kinship bondage and tribal affinities, precluded the development of market exchange relations and the modes of surplus appropriation characteristic of the capitalistic mode of production. The only remote possible exception could be that the main form of appropriation occurred at the level of the family where senior men exploited their juniors (e.g. sons) and their womenfolk (Ibid: 6). But an important aspect of economic life in these pre-capitalist societies was a differentiation between the mass of subjects who engaged in the daily activities of subsistence production , and between a royal aristocracy in whose hands rested the prerogative control of a lucrative trans-Saharan caravan foreign trade.

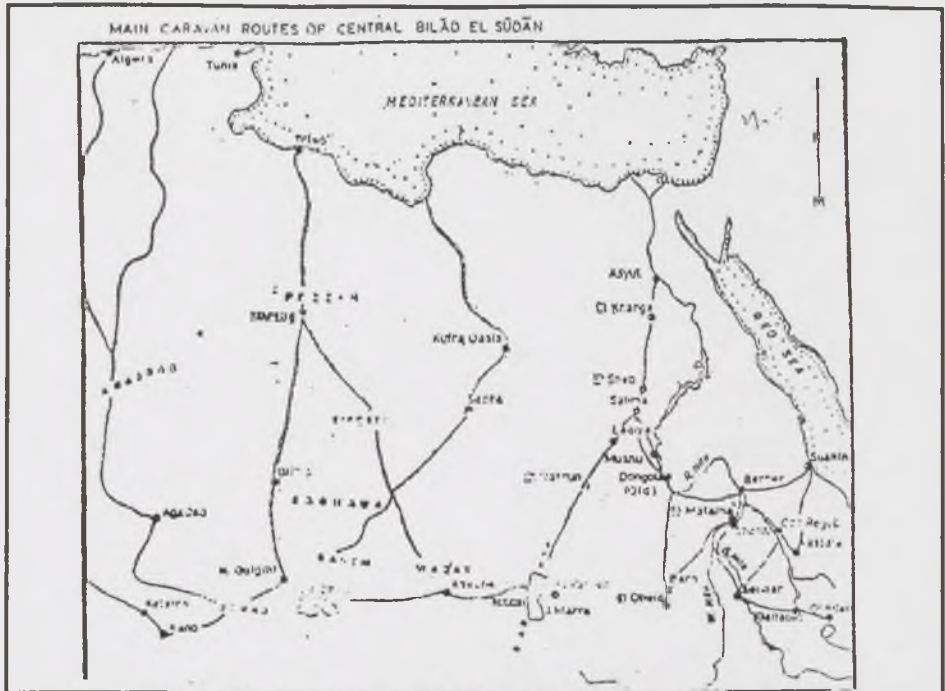
The pre-colonial states in *Kordofan*, the *Fur* and the *Fung*; like other ancient Sudanic states; i.e. the *Daju* (before 1500 AD); the *Tunjur* (1500 - 1650); the *Masalit Sultanate* (1874 - 1922); the *Shiluk Kingdom*; the *Sinnar Sultanate* (1500 - 1821); and the recent *Dar Fur Sultanate* (1899 - 1916); all had long had an established trade with the Mediterranean culture through the trans-Saharan trade routes. However, the activities and benefits of this old trade had been the exclusive prerogative of the royalty and their

court. The ruling family and the royal court usually exercised monopolistic control over this form of trade. Commoners were excluded from participation and no indigenous class of professional merchants was allowed. The commoners were levied for taxes in kind which were bulked to form the articles of the royal export trade. Kapteijns and Spaulding describe the structure of this trade:

A fundamental obligation of each subject group was to contribute to the support of the ruling establishment through labour services and the delivery of taxes in kind, notably in the form of grain, meat, ... cotton ... gold, honey, or ivory ... Local and regional exchange among commoners in basic resources was acceptable, but no indigenous class of professional merchants was tolerated; the system of taxation was structured to gather precious goods of potential export value such as gold or ivory in the hands of the government which administered a monopolistic foreign commerce (Kapteijns and Spaulding 1991: 910).

Trade routes connected *DarFur* with Egypt, the Nilotic Sudan, the Chad Basin, Tripolitania, and Tunisia. The infiltration of nomad Arab groups in the fifteenth and sixteenth centuries came from Egypt, Nilotic Sudan, and to a lesser extent from Tunisia (Yousif Fadl 1977: 202-3). Trade was an important agent in the rise and power of the *Fur* Sultanate. The impetus of change from a tribal chiefdom to a supra-tribal Sultanate probably came from the long distance Caravan trade (O'Fahey 1971: 87). The interest of the *Fur* Sultans in *Kordofan* possibly had economic causes; since they were bent on controlling the trade routes, the sources of black slaves, and the trickle of gold from southern *Kordofan* (Yousif Fadl 1977). Three trade routes connected *DarFur* with the outer world. The first, and possibly the oldest, was the inland route starting from Western *Bilad al-Sudan*, passing via *Burnu*, *Wadai*, *DarFur*, and the *Fung Sultanate* to the Red Sea Ports and the *Hijaz*. The second, was the famous *Darb al-Arba'in* (the Forty Days Road) to Egypt; and the third took a North Westerly direction to Tripoli and Tunisia via *Fezzan* (O'Fahey 1971, 1977; Lavers 1977; Yousif Fadl and Doornbus 1977). Trading centres developed along these caravan trade routes where most of the trading activities were conducted under government supervision. The first route was probably more significant culturally as the umbilical cord to nurture Islamic cultural influences into *Bilad al-Sudan* and its assimilation more into an easterly cultural Islamic orbit. The second route was possibly more significant from an economic point of view. These caravan trade routes were an important source of revenue to the state. In all market centres along the trade routes, a tax levy of a tenth of the value of all traded goods was collected, with the exception of slaves, where a fifth of the value was collected by the state. The Sultan was the "major entrepreneur" of most of the trading activities. The lucrative benefits that accrued to the Sultan and his Court from the "administered trade" gave the Sultan the necessary means to extend and consolidate his authority; the imported luxury goods were used as

Figure 4 Trans-Saharan Caravan Trade Routes of Western Sudan



Source: Yousuf Fadl Hassan and P. Doornbus 1977: 206.

necessary political aides to consolidate the Sultan's authority by rewarding tribal chiefs, winning allies, and to add an aura of royal dignity and excellence on the Sultan's Court.

There clearly existed two types of trade: local and foreign. The local trade involved forms of local-level exchanges among the local populations; the subjects of the Sultan. This type of exchange could hardly be called "trade", since it involved no large-scale transactions or the purposive extraction of profit, but a characteristic feature of it had been the satisfaction of basic local needs at the household and village levels through mutual exchanges involving small surpluses that the local people were able to make each from their respective trades. The medium of exchange of this form of local trade had variously been different media: e.g. *Damour*, rings made of copper or tin which constituted a form of a coinage in *DarFur*. Barter exchange was also common practice. The local commodities exchanged were principally of agricultural nature, including animals, and small crafts and trades. Agricultural produce included *dukhn*, onions, vegetables, cotton, and coarse cotton cloth called *Damour*, fruits, tamarind (or *Ardeb*). Items of crafts and trades included agricultural tools (hoes, axes), crude metal ornaments, saddles, leather wear (shoes, ropes, knits), skins, hides and containers, wool mats, etc.; all of which were made by both men and women and exchanged locally.

The foreign trade, on the other hand, is a restricted domain the exclusive prerogative of the royalty; the Sultan and his Court, as was the case with most of the Sudanese states

(O'Fahey 1971, 1977). The royalty had vested interests in this trade, therefore, the foreign trade enjoyed their patronage and protection. "The export of slaves, ivory, ostrich feathers in exchange for luxury imports complemented one another to such an extent that they became interdependent" (Yousif Fadl 1977: 204). Fine cotton textiles, silks, precious jewellery, weapons, firearms, ammunition, swords, gun powder, sandalwood were important items of the import trade. *Darb el Arba'in* (the Forty Days Road) was a vital trans-Saharan trade route serving as the umbilical cord connecting *DarFur* with *Kordofan* and Egypt. It was actively busy since the mid-sixteenth century when Egyptian traders were exchanging arms for gold with the King of *Uri*, and exchanging goods with the *Fazara* Arabs of *Barr al-Sudan*; 'desert fringe' (Waltz, 1975; cited in Yousif Fadl 1977).

Exports from *DarFur* included: besides slaves as the main export, gum Arabic, seamless water skins, natron, gold, copper, ivory, ostrich feathers, ebony, and rhinoceros horns. Imports included: fine cotton textiles, silks, metal hardware, weaponry, (firearms, gun powder, ammunition, swords, armour), jewellery, carpets, beads, sandalwood, saddles, riding horses, sugar and coffee. These items of the import trade came to *DarFur* and *Kordofan* from the Egyptian and North African market centres, which originally came to these centres from diverse sources world-wide; from India, Bengal, Europe, Syria, and from Egypt and the Eastern Mediterranean markets. The size of the caravans carrying the bulk of the trans-Saharan trade since the beginning of the 18th century varied greatly. Browne (1799) estimated a caravan of about two thousand camels and a thousand slaves to be large by *DarFur* standards. Other estimates ranged between 2400 to 5000 camels. The major part of the camels carrying this trade are sold in Egypt, thus the camel trade accounted for about 25% of the total value of trade imported into Egypt from *DarFur* and *Kordofan* (Walz in Hassan 1977). The slave trade accounted for 40% and constituted the most important part of the trade.

The *Bedouin* tribes; e.g. the *Hamar* and *Dar Hamid*- who inhabited *Bar al-Sudan*, or the desert fringe of North *Kordofan* and North *DarFur*, were nomadic camelmen, owning large herds of camels and smaller stock, were the chief suppliers of the camels involved in the transport of the trans-Saharan caravan trade. They supplied camels for the transport of the volume of both the export and import trade coming from the Nilotic Sudan conducted by the *Jellaba* traders, but most strategically, for the royal Courts of both the *Fur* and the *Fung Sultans*. Additionally, but most importantly, these *Bedouin* camelmen provided the expertise of guiding the way of the caravans in their travels in the unknown wilderness of the desert where they have first-hand experience and knowledge. The *Bedouin* guides thus guided the loaded caravans through the unknown recesses of the desert to arrive to safety at Egyptian and other North African and Mediterranean market centres. A necessary component of this expertise which the

Bedouins provided was the insurance of security for the travelling caravans from the predatory attacks and depredations of wild Desert dwellers and vagabonds, and other desert predators. This security provision was the responsibility of the contracted tribe providing the caravan camels and guidance expertise. This arrangement necessarily called for the establishment of networks and the forging of alliances on a tripartite basis: among the *Bedouin* tribes themselves; between them and the royal Courts, and between these and the *Jellaba* traders. These alliances which were structured around trade and sprang essentially for its promotion and safety indeed assumed strong political alliances serving the interests and mutual benefits of all partners involved. In particular, the alliance that sprang between the *Bedouin* camel-owning tribes and the Royal Courts assumed strong political character which required the mutual recognition and observance of the interests of each party. The *Bedouin* camel-owning tribes from their part provided the required numbers of camels necessary to carry the trade, provided expertise and security without which trade would have been impossible to conduct. In return, the Royal Courts granted their tribal allies a good measure of autonomy and independence from the central authority of the state, and guaranteed of non-interference in their internal tribal affairs, with a measure of state protection. Thus, these *Bedouin* tribes remained largely autonomous and independent of state central control. Nonetheless, they also remained strong allies and partners in the general prosperity that the trans-Saharan trade brought into *DarFur* and *Kordofan*, and the stability that consequently prevailed. These tribes continued to pay a voluntary annual gift to the *Fur* Sultan, mostly in terms of camels. In return, the Sultan granted them their autonomy and independence, indeed, gave them a free hand over other groups and considerable freedom in the slave trade. The Sultan also relied on them as indispensable partners in the slave raids on the regions further afield in Southern *DarFur*. Thus the Arab camel-owning tribes in North *Kordofan* desert fringe benefited, indeed prospered from the trans-Saharan trade as a necessary condition of the political alliances that had been forged between them and the *Fur Sultanate*. They prospered not only from the hire of their camels (and the subsequent sale thereof in outside markets), but also from the proceeds as partners in the trade. In a different alliance, these *Bedouin* tribes also benefited from hiring their camels to the *Jellaba* traders who carried their trade between the Nilotic Sudan and Western *Bilad al-Sudan*; i.e. *DarFur* and *Wadai*.

The hegemony of the *Fur* Sultans over *Kordofan* was generally characterised by the prevalence of peace, stability, and prosperity as accretions brought by the trans-Saharan trade. The *Bedouin* Arab tribes, in particular, benefited and prospered from this trade since they became indispensable partners, and political alliances were formed between them and the Royal Court as necessary conditions in the conduct of the trade. This state of affairs continued until the Turk-Egyptian invasion in 1821, which ended the *Fur*

hegemony over *Kordofan*. The *Hamar* and *Dar Hamid* were among the wealthiest of all tribes in camel herds during this period. The *Hamar*, in particular, were said to be the wealthiest of all tribes in this belt of Africa during this period.

Kordofan had known trade with the outside world before the advent of colonialism. Pre-colonial foreign trade had been the prerogative of the ruling establishment both in the control over it and in the kind of goods it brought to confer on the Court. This structure of the trade continued until it was eventually superseded by the market exchange relations brought in the contemporary era by the advent of the colonial rule; first to be established by the Turko-Egyptian invasion and the demise of the *Sinnar Sultanate* in 1821. This stage had witnessed a wider use of money, and more importantly, it marked the rise of an indigenous merchant class, especially from among members of the riverine groups along the Nile Valley. The areas along the Nile had thus been the first to be exposed to increased intensification of the market exchange relations. The interior of the country remained virtually insulated. This slow process of market integration, however limited, was brought to a halt during the *Mahdia*, only to be revived and greatly accelerated during the British rule in Sudan (Barbour 1961; Tully 1988; Bernal 1991; Kapteijns and Spaulding 1991).

3- 8- Food Security and State Provisioning in Old *Kordofan*:

There is very little material on the state of food security and the role of the state in food provisioning in those earlier days in *Kordofan*. However, some evidence suggests that the *Fur* and the *Fung* Sultans used to distribute food during times of dearth. They kept state-controlled granaries (called *shunas*), especially for the armies, but also for strategic food security purposes. It seems likely that, like most of the Sudanic states at this period, the Sultan has an obligation towards his subjects during times of dearth and famines (Tully 1988; Watts 1983; 1984). An elderly informant told that during times of acute food shortage and famines in *Kordofan* during the *Fur* hegemony, the *Fur* Sultan used to distribute food, or requisition grains from food-surplus areas to be moved to famine-affected areas, or else if food is not forthcoming, allow the hungry to loot regions where food can be available, especially the regions to the South. But an important aspect of the local food needs at that time, is that grain requirements for the pastoral household, such as the *Hamar* and *Dar Hamid* are minimal since they depend on animal products in the most part of their food. I was told that households used to consume little grain compared with their present consumption levels. At present households depend entirely on grains for their food needs following their sedentarisation and loss of animals. For these reasons that the recorded famines during this period were few and localised. We hardly know of a wide-spread famine during this period. Only

during the Turkiyyia and most notably during the *Mahdiyyia* did large famines occur, especially the traumatic *Sanat Sitta* famine. But even here the development of such a wide famine should be understood in its political context, as Daly (1986) reminds us:

The cataclysms of the revolutionary period and the wars and rebellions that followed, culminating in the Anglo-Egyptian aggression of 1896-98, caused severe economic disarray. The forced migration of "Western" tribes to Omdurman, the conscription of agricultural and other slaves into the *Khalifa's* Jihadiya, and the methods of tax collection inevitably had adverse effects on agriculture, and no doubt contributed to the severity of the 1889-90 famine. ... Foreign trade almost dried up, as a result of the Mahdist and British policy, the coinage was debased, the telegraph system all but destroyed, the cultivated area reduced and famine and epidemics befell the country (Daly 1986: 193 - 4).

Sanat Sitta famine was as much a result of the *Khalifa's* policies of enforced migration as it was of the Anglo-Egyptian aggression, and concomitant dislocation of the communities and disruption to food production. The advent of the colonial powers in Sudan ushered in a new era in which *Kordofan* has been permanently drawn into the fabric of the modern Sudanese state. From the outset, the character of the new state is understandably hostile to the region, apprehensive of its *Mahdist* fervour and loyalties. The national forces who were to assume power on the eve of independence were to prove no better than the departing colonial masters as far as *Kordofan* was concerned. The following chapter deals with the character of the modern Sudanese state and the balance of social forces who inherited political power at independence. These developments were to determine the future shape of *Kordofan* and the fate of its people.

3- 9- The History of Famine in *Dar Hamid* and *Dar Hamar*:

It is very difficult to identify famine years that in the past have occurred in *Kordofan* generally and in particular *Dar Hamid* and *Dar Hamar*. There is however, several authorities giving different listings of previous famines in Sudan as a whole (Ibrahim. 1985; Tesfaye et al 1991; Cater 1986; De Waal 1988). A quick look at these listings reveals two important facts: that famines are not a new phenomena to Sudan, and that past famines have generally been localised occurrences of transient or acute food deficits. The apparent preponderance of such famine episodes is apt to lead to a simplistic generalisation that people have learnt to submit fatefully to the vagaries of nature and to live with famines. This implicit message of determinism is carried in such phrases as 'sons and daughters of drought' used in such fatalistic finality by De Waal (1989). Indeed, De Waal, and the others who have stressed the theme that famines are part of the living human experience in these environments, have at the same time obscured the important fact that past famines have nearly always been localised

phenomena confined to specific localities, and that local people's resourcefulness and responses have always found ways of procuring food grains from other areas and of other ways and means of mitigating the severity of the food shortfall. The blanket listings of preponderant famines in Sudan, with its fatalistic note, reminiscent of the Malthusian tradition, emphasises the negative aspects of such cataclysms (see introduction for more details). The contention of this argument is to challenge such fatalism and to offer a more positivistic approach and outlook based on a thorough investigation and a living life experience in *Kordofan* countryside of peoples' resourcefulness, ingenuity and resilience to adapt their way of life in ways which enabled them to cope with the vicissitudes of life in the past as well as in the present.

The famines that have been reported to have occurred in *Dar Hamid* and *Dar Hamar* are few. However, we can distinguish between two types of food shortage: a temporary shortfall and an acute deficit. Harvests can fluctuate greatly in these environments in accordance with climatic fluctuations, soil types and fertility, labour inputs, etc., such that there may occur excellent bountiful harvests over some years, poor harvests over some years, or may completely fail. The local populations vary their food consumption strategies in accordance with the volume of harvests they gather. When harvests are bountiful, they usually have excess food which they either store in grain pits or lend to other borrowers in the food deficit areas, whether these be relatives, friends or acquaintances. The grains thus borrowed will be returned next harvest, so in a sense, it also represents a form of social storage with added social benefits of entitlement to a similar borrowing if today's lender should experience food hardship at a later time. When harvests are poor, people seek to supplement their household food stocks by work or borrowing from neighbouring communities, or a bit of 'tightening the belt' on normal consumption levels. This represents what could be termed a temporary shortfall in food supply. Only when harvests completely fail leading to acute food deficits that famine may develop. But complete harvest failure affecting the whole spectrum of the different ecological zones has been rare; nor had such harvest failures been a necessary condition which automatically translated into famine. Only when other factors come into play, particularly those of a political nature, that harvest failure associated with climatic perturbations developed into famine, as *Sanat Sitta* of 1889-90 demonstrated. The development of mass famines had in many cases been counter-checked by the fact that rarely did harvests fail concurrently and simultaneously over entire ecological zones. This is why we see that most previous famines have been localised, and their worst effects have mostly been averted by importing food grains from better producing areas.

There were a few localised famines that had occurred in the past which the local people can recall with any certainty and have been passed down through folk memory in *Dar Hamid and Dar Hamar*. One important point to be emphasised is that most of these

were localised occurrences, and that a famine that was reported to have happened in one area did not in fact affect other areas except in the all-engulfing *Sanat Sitta Famine* in 1889 - 90, and the most recent famines of the 1980s and 1990s. Other episodes of hardships that have occurred in *Dar Hamar* and in *Dar Hamid* include localised transient or acute food deficits associated with normal climatic fluctuations and the success or failure of harvests. These occurrences were part of the normal fluctuations associated with the semi-arid climate. The food deficits that result from such fluctuations are part of the conditions in these environments which the local populations have learnt to cope with in so many different ways which enabled them to avert the occurrence of mass famines.

3- 9- 1- Famine in Dar Hamid:

Of the localised episodes of acute food shortage that have been recalled in the past in *Dar Hamid* is a harvest failure associated with a *hargah* (drought) which occurred in the *Dar* at about the time of the expedition sent by the colonial government to subdue Sultan *Ali Dinar*, Sultan of the *Fur*, to finally annex *DarFur* to the rest of the Anglo-Egyptian Sudan. This was about 1916. The drought year induced a movement of people Southwards especially to *Dar Nuba*, where they either settled temporarily, worked or bought food from *Kadugli* and transported back to the villages on comeback. Accordingly, the drought year was named *Sanat Kadugli*, after the town of *Kadugli* in Southern *Kordofan* where people moved to. A small number of people migrated from the villages to *El-Obeid*. No famine developed in this drought year (Field-work data 1993).

Again, in *Dar Hamid*, and in *Al-Saata* area, immediately South of the area described above, elderly informants recalled a bad harvest failure that had occurred in the mid-1940s. One important strategy employed to cope with the stress, was that people moved southwards to more affluent areas, mainly to *Dar Hamar*, *Dar Bideiriyya*, and *Dar Jawamaa* in search of food. They settled temporarily in the areas whereto they moved, worked in the harvesting of grains on an agreed share of the crop, and shared with the hosting neighbouring communities their affluence and good fortune. They were welcomed by their neighbours who gave them residence, food and employment and a generous share from the harvest in which they took part. The movement and contacts with these neighbouring communities also provided a base for more enduring relationships, such that ties of friendships, acquaintances and marriages were forged. Such enduring social bonds as occasioned by those movements hold until today between the *Hamar* and *Dar Hamid*, the *Bideiriyya* and *Jauamaa*. During such times of food scarcity, food grains had also been brought from as far West as *Dar Fur* by the *Maalia*

camels men, who, employed their camels in transporting food grains helped by their knowledge of the desert routes (Field-work data 1993).

Another episode that have been recalled in the past in *Dar Hamid* is one called *Sanat Salafiyya* - (meaning the year of borrowing)- which occurred in Northern *Dar Hamid*. It is reported that in this famine a *malwa* (a small measure) of sorghum *Fatarita* reached a record of .25 piasters (25% of a Sudanese pound); which suggests that this famine may have occurred in the late 1960s or early 1970s. Until this period food grains have been generally abundant and prices low. This famine was severe judging from the few reported deaths that had occurred, and people resorted to eating *Bejbeji*; a porridge prepared from melon-seeds mixed with little *dura* flour, and resort to unpalatable wild forest foods such as the bitter berries of the *Mukheit* (*Boscia senegalensis*). These indicators suggest that this famine has been severe. However, the local population in the affected area did cope with the famine without state provisioning. These episodes of harvest failure in *Dar Hamid* suggest that past famines in this area had been localised occurrences, and that the affected populations coped with them by moving to better-endowed areas. No mass famine was reported to have developed during that period (Field-work data 1993).

3- 9- 2- Famine in Dar Hamar:

In *Dar Hamar*, elderly people recalled two drought episodes, one of which resulted in a severe famine associated with a large-scale failure of harvest over the major part of the *Dar*; the other resulted in a severe shortage of water, not of food grains. The drought/famine year occurred when one elderly informant was about the stage of manhood. Judging that he was born at the turn of the century, this famine may probably have occurred between 1914-16. It was said to be a severe famine; food was scarce in the locality, and found with only one notable man, namely; *Sheikh Bakhari*, the *Shartai* of the *Jawamaa*. *Sheikh Bakhari* was well known for his meticulousness about keeping sizeable quantities of grains in reserve at all times. However, people mitigated the worst effects of the famine by reliance on many useful strategies. They moved to the *Nuba Mountains* and brought food on camelback, although the grain brought was the unpopular sorghum (Field-work data 1993).

Another important strategy was that people resorted heavily to supplement their diet with meat. They hunted wild animals which were abundant at the time and in easy reach from the village. Hunting parties would go out for the hunt and returned with Gezzeles, foxes, rabbits, hyenas, wolves, feasts, wild geese, etc. Some of the village members were famous hunters, and they used to travel long distances for longer periods of time in hunting parties composed of a caravan of camels and gunmen. They brought back the hunt in the form of *sharmout* i.e. dried meat to the village families. In the village of

Omdofais, *Sheikh Ajab al-Habib*, founder of the village, was a famous hunter, and in bad years he and others used to tidy his people by hunting wild animals, bringing fresh and dried meat by which to carry them through to the main harvest. Other food supplements, besides meat, are dates and milk, and *merisa*, locally brewed beer. The food regime, was evidently more diversified and richer in protein content than at present

A most effective strategy had been the collection of wild berries called *Mukheit*. Large quantities of these berries were collected and brought in large leather sacks called *Jurban*, soaked in water for several days to remove their toxic bitter qualities, then dried and ground as flour from which food is prepared. The food thus prepared may be toxic if the berries have not been thoroughly soaked in water. The village population fall back on this strategy only as the final resort when all others failed, which suggests a hardship of wide-spread proportions affecting larger communities simultaneously.

The other occurrence of drought did not result in harvest failure and food shortage, but led to dryness and general lack of water. In *Dar Hamar* it was customary to store water in the *Tebeldi* (Boabab) tress, and supplemented by the use of water-melons as a secondary source of water. The drought drastically curtailed the amount of water to be stored in the *Tebeldi*, and, coupled with a failure of the melon harvest, resulted in a severe shortage of water and incapacitated the two main sources of water supply in *Dar Hamar* at the time. Under the ensuing shortage, and the compulsion of the necessity of water, people moved Southwards to areas where water supply is more abundant for both humans and animals. Masses of people moved to and settled temporarily during the dry season in *damar* camps, congregating in and around *Abu Zabad*, *Um Jigru* in the vicinity of *al-Turdah*; a hand of *Khor Abu Habil*. Here water supply is permanent and more reliable and can be obtained from the shallow wells in *Um Jigru* and from the large shallow pool of *al-Turdah* at *Abu Zabad*. This large pool provides permanent water the year round, and in normal years, but especially during years of droughts, people move with their families and animals to water and graze here during the dry season. Thus, in this drought which occurred about 1918 - 19, people moved from areas of drought and waterlessness, and congregated in large numbers in the vicinity of *Abu Zabad*, driven by aridity and lack of water. The drought year was named *Sanat Um Kreidmi*, (meaning the year of crowdedness) in account of the large masses of people crowded in this small area of plenty water (Field-work data 1993). It should be noted that no famine developed in this year, and no account of shortage of food reported. Indeed, there are stories of ties of friendships established, of marriages, exchange of goods and benefits, and of merry-making of friends meeting at drinking parties of *merisa* a local beer brewed from millet. All of these accounts suggest that people had been able to turn their adversity into a rather happy sojourn. The elderly village respondents reported that years of droughts were frequent in the past, which may lead to

poor harvests, or complete harvest failures. But complete harvest failure affecting the entire communities was rare. They distinguished between the seasonal hunger period which is an annual normal occurrence, experiences of hunger associated with poor harvests, and a more protracted acute hunger, or famine which is rare. On the whole, the local people are not perturbed of such occurrences, since they possess large enough scope for coping strategies sufficient to enable them overcome the adversities (Field-work data 1993).

Events and developments taking place beyond Sudan's borders were to determine the future shape and fortunes of the rural populations in *Kordofan*. *Kordofan* had been the decisive agent in the creation of the Sudanese state in its present boundaries since it is from *Kordofan* that the *Mahdist* state eventually made its success. Ironically, the feat of *Kordofan* as the major force in the building of the modern Sudanese state has turned into a curse on her in recent history in which the region suffered marginalisation, exploitation and neglect. The next phase in the history of *Kordofan* coincides with the development of agriculture in the context of the modern Sudanese state. The development of agriculture has been greatly encouraged by the policies of both the colonial and post-colonial governments. The following chapter focuses on the reorganisation, under official state policies, of the rural production relations around agricultural labour for the realisation of marketable agricultural surpluses. The important point to be stressed is that agriculture has brought new dangers and new risks, such as creates profound and grave consequences relating to matters of security and survival of the rural populations.

Conclusion:

This chapter has drawn a picture of life in old *Kordofan* until about the turn of the century. The chapter is intended to provide a historical background to the social and political history of the region, and how social and political change had affected the way people lived, and how they adapted both to the conditions of the arid environment, and to the political and ecological changes taking place in their social and physical environments. We have argued that the pastoral way of life was/is most suited to the semi-arid conditions of north *Kordofan*. That the pastoral communities of *Dar Hamid* and *Dar Hamar* came into contact with the *Fur* and *Fung* Sultanates, and both benefited, indeed prospered from a flourishing trans-Saharan trade. The rise of the modern Sudanese state in subsequent histories and the gradual incorporation of

Kordofan in its fabric has had deleterious effects on *Kordofan* rural communities which ultimately translated into exploitation and impoverishment unto famine.

Chapter 4

The Modern Sudanese State

Introduction:

Theories of famine have invariably neglected discussions about the character of the state as irrelevant to the debate on famine. The character of the state indeed lies at the heart of any study of famine to the extent that famine affects certain groups in the society which calls for a close analysis of the structures of power in that society to bring out why some groups are vulnerable to famine while others are not. Indeed some groups may even "benefit" from famine (Keen 1994). This chapter considers the structures of power in the contemporary Sudanese society; of dominance and subordination. It traces in a historical perspective the evolution of the modern Sudanese state, and the emergence of the social balances of power in Sudanese social and political relations since the colonial era. This chapter establishes that *Kordofan* generally has been marginalised in the domestic politics after having been the main force in bringing out the Sudanese state in its present shape during the *Mahdiyya*. In the recent history of the modern Sudanese state *Kordofan* has been progressively marginalised and relegated to a back garden, as a domain of extraction for the benefit of the state and the emerging elites.

This chapter traces the long-term structural processes which were responsible for the impoverishment of the rural peasant producers in *Kordofan* and their ultimate vulnerability to famine. It will trace in a historical perspective the origins of the macro-structural socio-economic regional polarisation and social differentiation to the development policies of the colonial state in Sudan, and subsequent national rule. The aspects of the colonial state's policies which will be examined include a brief exposition of the colonial ideology as it evolved in its home context; its domestic and international underpinnings and the manner in which these had influenced the British colonial decision to extend British rule over the Sudan. It will be argued that the subsequent colonial policies in Sudan had laid the foundations for the integration of the Sudanese economy and society into the international market system, and in effect opened up the pre-capitalist local economies to the influences of international systems. Subsequent national rule has maintained the colonial structures unchanged, not just out of narrow self interest of the early Sudanese leaders, as Niblock (1987), Woodward (1990), and *Khalid* (1985) have argued, but for other more powerful interests associated with external forces bearing on the Sudanese state. We distinguish between three driving forces which have influenced political decisions on the choice and approach to national

development planning in three periods in the post-independence era. During the colonial project, and in three successive periods during national rule, the approach to development has favoured certain groups, but has consistently been skewed against the interests of the rural populations. In all, external interests have played a decisive role. The distortions in the market between the structures of dominance and the subordinated rural economies which arise from the integration into the market have created conditions of regional inequalities and social differentiation which, we argue, lie at the root of rural poverty and the related problems of hunger and famines.

4- 1- The Colonial Project in Sudan

The British colonial policy to extend their influence over the Sudan was initially motivated by strategic considerations. Britain had a large and vibrant trade with the East Indies, the Indian Sub-Continent, China and the Pacific. In order to secure a safe passage of this large trade, Britain needed to protect the Suez Canal which by implication meant to extend her influence over Egypt. And in order to accomplish this strategic objective, especially after the Egyptian Nationalist movement in the 1870s, and the rise of the *Mahdist* State in Sudan in 1885, it became the more imperative to secure the sources of the Upper Nile. And the security of the Upper sources of the Nile would secure the British interests in East Central Africa which in turn link with her strategic dominions in South Africa and the Cape trade route. Thus, it was conceived by the British colonial Empire Builders Britain's sphere of influence would extend from Alexandria on the Mediterranean to the Cape cutting all across East/Central Africa (Pakenham 1991). The central point of gravity of the strategy was primarily a concern with Egypt and the safety of the Suez Canal, if the Eastern trade was to flow securely. Therefore, other powers needed to be kept at bay from the sources of the Nile, especially Germany and Italy. And more immediately, to eliminate the direct threat of the *Mahdist* State in order to undercut the prospects of a Muslim state outreaching to the interior of the African continent. The decision was thus taken in 1898 under the Premiership of Salisbury to invade Sudan from Egypt (McIntyre 1966). The strategic explanation is only the obvious part in the story of the Anglo-Egyptian invasion on Sudan in the colonial Scrabble for Africa. Other more decisive factors were the economic and social problems facing the British government, and the commercial interests of certain influential power groups, and in the case of Sudan, namely that of the commercial interests of the influential lobby of the textile industrialists. The effects of the Depression combined with Britain's blunted competitive edge were to create a host of domestic problems with which the ruling establishment had had to tender. The magnitude of the problems produced fears among the British ruling classes about the

possible social and political repercussions of such problems. The extent of the problems which the decline of the British economy entailed was that:

This collapse manifested itself in several important ways. There was to be almost continuous underemployment in traditional export industries - especially cotton textiles, coal mining, shipbuilding and steel. European markets were disrupted by the war and, once reorganised, were to produce modernised industry capable of driving Britain out of their own and other markets. The liquidation of external assets and the acceptance of large American loans during the war increased the need to export ... Finally, the period also saw the rise of governments throughout the non-colonial world committed to protection and direct subsidies to displace British exports from their own markets and those under their colonial control (Brett 1973: 71-2).

These fears were expressed in terms of the likely disruption to the state of law and order and threats to social stability, dislocation, discontent and social unrest. If conditions were allowed to take such a dangerous course, the whole capitalist system, it was feared, could be in jeopardy. Lloyd George, for example, talking of the need to "quieten labour", warned that unless the workers' conditions were to be salvaged, "they strike, and a strike may end in revolution"; and added that "you must give the people a horizon, or they will look at their wretched surroundings and once they lose hope, there is nothing but revolution and trouble" (Cited in Brett 1973: 117). Under the pressure of domestic economic crisis, its likely dangerous social and political consequences could only be salvaged by boosting trade through direct and forceful control over overseas markets. The economic crisis made it difficult for the British government to commit the necessary capital for the development of the colonies. The strains caused the policy of devolution to be launched. The spirit of the policy was to devolve responsibility away from the centre to the colonial governments so that they can each embark on their development programmes in a pace commensurate with their resources and to work towards self-sufficiency. This was envisaged to incur minimal costs on the metropolitan centre. The policy of devolution envisaged that:

British theory in this area constantly assumed that the contradiction between the need for change and the very limited availability of metropolitan resources to initiate and manage the change could be resolved through the devolution of power to effectively decentralised political and administrative structures. It was widely believed that colonies could be quickly equipped with the basic administrative and economic infrastructure and therefore meet their own costs from internal sources. Local structures - administrators, Legislative Councils, and even chiefs - were expected to carry out their duties with only minimal recourse to the centre (Brett 1973).

In the spirit of colonial devolution, the Sudan colonial government embarked on its development programme of the economy that would in due time enable her to become self-sufficient. The role of the British textile industrialists has been decisive in shaping the colonial development project for Sudan. The textile industry was one of the leading sectors in the British economy and one of strategic significance because it provided

employment for a large section of the labour force. Consequently it had traditionally influenced the political decision in key areas of the economy, especially with regard to the colonies, not least also because it had an influential lobby with a strong voice within the decision-making circles. Given this strategic importance of the textile industry the adversities which had befallen this sector were to overshadow not only the British economy, but also the society and politics. These adversities could be summed up in the following indicators: (1) the generalised effects of the depression since the War led to a depressed international economic activity and a general decline in the British textile purchases; (2) the high costs of production of the British textile manufactures made it to lose competitiveness in the international market, especially with Japanese manufactures; (3) the unreliability of the American cotton supply as a result of the disease the "boll weevil", and the American Civil War which disrupted production in the Southern plantations prairies, in turn led to (4) rising prices of raw cotton since the end of the War. These developments seriously undermined the performance of the British textile industry in providing employment. This had in turn posed direct political pressures on the government to take immediate action. As a result, in the programmes for development of the colonies, priority was given to the demands of the textile industrialists in order to find and secure new sources of supply of raw cotton.

While the demand for self-sufficiency and the need to increase exports because of unemployment tended to produce a generalised commitment to programmes of colonial development, that for raw materials tended to take specific forms derived from the needs of particular classes of manufacturers in difficulties, by far the most important of these in the case of Sudan were the textile industrialists, who were forced due to the drying up of American supplies to pay what they regarded as unreasonably high prices for raw cotton from the end of the war until about 1926. Their needs were to be of prime importance in determining both the nature of the aid programme ultimately evolved in east Africa and the areas in which it was to be spent. [Therefore], the Empire cotton Growing Association (ECGA) was set up ... [to ensure] an adequate Empire cotton supply (Brett 1973: 121-22).

In this context, the Sudan Plantations Syndicate (SPS) - a branch company of the Empire Cotton Growers' Association- was conceded in 1904 a lease by the Sudan Government to grow cotton in an area of 11000 feddans along the Nile. This initial experiment, known as the *Zeidab Scheme*, proved a marvellous success which to a large extent were to determine the subsequent economic development choices for the Sudan. The experiment was soon transferred to the *Gezira* where the existence "of extensive land suitable for irrigation" was developed into the famous *Gezira Scheme*; the largest centrally managed farm of its kind in the world. The British government found it opportune when in 1905 it was approached by a request from the British Cotton Growers Association (a consortium of the cotton industrialists established in 1902 by the Lancashire lobby) for a loan to build the *Sinnar Dam* for the irrigation of the *Gezira Cotton Scheme*, the British government immediately endorsed a loan of £ 19 million

from the treasury on low interest, more because of political expediency than of economic necessity. The Dam was built, the *Gezira* opened and cotton production started in 1925 (Gaitskell 1960, Memro 1984). The *Gezira Scheme* was carried out within the framework of the colonial development project. This programme was initially envisaged to bring about the necessary social and economic transformation of the colonies in the process of drawing the indigenous communities into the contemporary civilisation, and at the same time enriching international trade by bringing the products of these communities to the world markets. The civilisation side was soon abandoned as a result of the economic difficulties associated with the depression and the decline of the British economy after the war. The colonial policy therefore concentrated exclusively on the development of an export-oriented economy for the production of raw materials, and limited the development of the social and political institutions to narrow enclaves that were necessary for the export economy.

The development of the *Gezira Scheme* and indeed of the whole economy of the Sudan of which the *Gezira* occupies the centre of gravity, needs to be studied according to the postulates of the colonial development project. The essence of this project was the idea that the development of an export-oriented economy would secure the flow of cheap raw materials to the British industries to ensure the competitiveness of their products and hence of profitability; while at the same time the money that would accrue to the producers from such sales would be spent on purchases and orders of British manufactures. In this way, it was conceived, the money would come back to the mother country. This basic view put simply and forcefully at the meeting in 1923 of the Empire Cotton Growing Association:

... we shall in the future see the whole of our cotton coming from our own Dominions ... I believe that we shall thus secure cheap cotton, cheaper raw materials for the use of our British manufacturers. I also believe that in doing that we will be supplying a market for our own people beyond the seas, and that the money that they obtain for their cotton may to a great extent be spent in making purchases from the mother country. It is an ideal for which we all ought to work, that the money obtained from us should in a different form come back to this country (Empire Cotton Growing Association, Report of the Second Annual General Meeting, 1923: 8; cited in Brett 1973).

In this context, the Condominium invasion of 1889 on Sudan was contemplated and completed to dismantle the *Mahdist* state and to establish the Anglo-Egyptian hegemony over the Sudan. By the time of the Anglo-Egyptian invasion, the *Mahdist* state under the *Khalifa* was already overburdened with its internal problems, conflicts and warfare. But the state derived its main political support from the peoples of Western Sudan, especially from *Kordofan*. The unflinching support of the people of *Kordofan* to the *Mahdist* cause became a most damning liability for the region in the new political climate in the modern Sudanese state; during both colonial and national rule. The

traditionally hegemonic riverine Nile populations saw in the short-lived domination of the "*Gharraba*" viz.; "Westerners" an anachronism which they could not stomach, and which greatly prejudiced them against the *Khalifa* and his supporters from Western Sudan. Such that when the opportunity came with the coming of the colonisers, the riverine populations found in the new comers a powerful ally through whom they can hope to permanently eradicate the rule of the "*Gharraba*" and any groups other than the peoples of the Nile Valley. On the other hand, the colonial mind, on its part, saw in the peoples of the Nile an invaluable ally through whose collaboration they can achieve the economic and political goals of the colonial policy. The colonial policy was conceived of to develop modern economic enterprises in central Sudan along the banks of the Nile, therefore, needed the co-operation of the agro-based sedentary populations of the central riverine Sudan. Hence an alliance was forged between the colonisers and the people of the central Sudan in the building of the new state, in which the rural *Kordofan* populations became the most disadvantaged and disfavoured partners in the modern Sudanese state.

The colonial state thus allied itself to the sedentary agro-based communities of central Sudan, and as a result concentrated the development programme in these central regions; especially in the *Gezira* and along the Banks of Nile, for its own interests. In the general spirit of the colonial development programme, the *Gezira Scheme* was conceived and was officially inaugurated in 1924. The manner in which it continued to provide the British textile industry with a fresh supply of long staple cotton, and the way in which the money from cotton sales were spent on orders on British goods, and in consequence the opening up of the Sudanese market for British goods strongly linked the Sudan into the British sphere, and finally paved the way for the integration of the Sudan economy into the wider international economic system. The development of the *Gezira Scheme* and the related infrastructural developments that accompanied it along the riverine part of the Sudan also laid the foundations for regional inequalities that were to have grave consequences in the future developments in the country. The tenets of the colonial development programme were expressed in the Governor-General's first statement which set agenda in clear terms:

The task which the Sudan government has set itself to perform is primarily to confer the benefits of civilisation on the inhabitants by rendering secure, as far as possible, their persons and their property; by improving communications across those wide stretches of desert or wilderness which intervene between the main centres of population and productivity; by adding the fertility of the naturally rich soil by means of artificial irrigation ... ; and finally by providing - in addition to the great Nile waterway and railway which bind the Sudan to Egypt- a good port and harbour on the Red Sea within easy access of the interior, whereby the inhabitants may be more economically furnished with their requirements from abroad, and may find outside markets for their natural products (Governor-General Wingate, quoted in Gaitskell 1959: 34).

In order to carry out this ambitious programme, large amounts of capital outlays were needed in the initial stages. How to finance this development programme, however, was a dilemma. Government revenue was small, estimated in 1898 to be about S£8000, compared to S£221 000 of expenditure, with a deficit of S£213 000. The deficit was to be born by the government of Egypt. It was not possible to raise taxes after the cruelty of the tax system under both the *Turkiyyah* and the *Mahdiyyah*. This was ruled out for fear that raising taxes was apt to arouse popular hostility and distrust towards the new government. It was also considered incongruent with the government's commitment to win the confidence of the people. Nor was it possible to obtain the required capital finance from the British Treasury owing to its own domestic difficulties. The country's future prospects of increased wealth were envisioned to lay in the agriculture and animal sectors. This seemed the only possible means by which to generate the revenue required to carry out the task of civilisation as was set out in the Governor-General's programme for economic and social development. In this context the transformation of the different economies of Sudan, including those of *Kordofan* rural economies took place in order to achieve set goals within the framework of the colonial project (for *Kordofan*, see next chapter). The areas along the Nile had thus been the first to be exposed to increased intensification of the market exchange relations. The interior of the country remained virtually insulated. This slow process of market integration has been greatly accelerated during the British rule in Sudan (Barbour 1961; Tully 1988; Bernal 1991; Kapteijns and Spaulding 1991).

The *Gezira Scheme*, the largest centrally run and governmentally owned enterprise, was an expression of the alliance between the colonial state- the guardian of powerful foreign interests- and the agro-based sedentary populations of central Sudan. It came to be a tripartite partnership between the tenant farmers, the Sudan Government and the management of the Scheme, the *Gezira Board* (GB). An effective and highly organised centralised management system was set up. The infrastructure of communication and transport was quickly developed in order to facilitate the smooth flow of resources. Social services of health, education, electricity and water networks were extended to villages, a developed system of agricultural extension and research was set up. All such facilities were set up amidst an increasing circulation of money which became increasingly available to the population from their cotton sales. Indeed, the development of the *Gezira* proved to be a rewarding "risk" from the part of the Financial Secretary Schuster, giving a "heartening finale" and handsome returns for the foreign companies which financed the project; and until 1950, the net profits to these companies came to over E£ 16 million (Gaitskell 1959) (for more details, see appendix C). Thus, the *Gezira*, became the backbone of the Sudan economy, together with the areas along the Banks of the Nile became modern prosperous enclaves relative to other regions which

remained untouched with the new surge of modernisation. The British colonial rule, therefore, had greatly accelerated the process of integration to a pace that was unprecedented in tempo and in pervasiveness. Within the span of about fifty years of British rule in Sudan, capitalist market relations in production and in exchange penetrated deep into the remotest communities. Barbour captures the differential character of integration into the international economy of different regions in the country:

The several regions of Sudan ... differ from one another not only in topography, climate, and population, but also in the degree to which their economies have been brought out of isolation and integrated with one another and the world at large. On the one hand, there are cotton growing areas by the Blue Nile and White Nile where the daily rise and fall of world cotton prices are followed and discussed by interested tenants and proprietors; on the other hand, there are villagers in *Jebel Mara* or tribesmen in south-eastern Equatoria where occasional sale of some grain or an animal to pay their taxes is almost their only contact with money throughout the year (Barbour 1961: 263).

However, the impact of the processes of penetration and integration had been very uneven. While the riverine central regions of Sudan were relatively highly developed as modern capitalist enclaves and were directly integrated into the world market, other regions remained as they had been before in using methods and techniques of production. This has created a situation of subordination of the traditional production systems precariously juxtaposed with the modern capitalistic enclaves in the centre.

4- 1- 1- Colonial Administration: Indirect Rule Policy:

The policy of Indirect Rule was conceived of and carried out with a view of making both economy and efficiency, and to create conditions of stability, of law and order, conducive to the progress of trade. The Milner Report to the Khedive of Egypt in 1921 stated that the future administration of the different parts of Sudan should be left, as far as possible, in the hands of native authorities under British supervision for the simple administrative needs of the country; would make for both economy and efficiency (The Milner Report, cited in Mac Michael 1935: 191). The Native Authorities were not independent authorities but the executive agents of the Central Government who carry out the Government policy. Some of the objectives of the policy of Indirect Rule were to combat what the colonial mind regarded as the evils of individualism, nationalism and Mahadism by invoking the "ideology of tribalism". But a tacit unstated objective was to countervail the rise of a distrusted educated Sudanese official class (Daly 1986; 360). Apprehension and distrust of this class became more urgently felt after the Egyptian nationalist revolution. Fears among the colonial authorities mounted that this revolutionary nationalist sentiment may be passed to Sudan through the Egyptian officials working there. As a result, these officials were returned to Egypt. A vacuum in

the administration ensued which needed to be filled by Sudanese recruits. But because of the distrust of the educated Sudanese, the government chose to rely on native authorities. The policy was henceforth actively pursued. In his "Memorandum to Mamurs", Kitchener, then Governor-General, urged his administration staff to actively seek the co-operation of the "better class of natives". He urged:

The task before us all, especially the Mamurs (Governors) and Inspectors (District Commissioners), is to acquire the confidence of the people, to develop their resources, and to raise them to a higher level. This can only be effected by the District Officers being thoroughly in touch with the better class of native, through whom we may hope gradually to influence the whole population (Kitchener, cited in Duncan 1957: 17-8).

The policy was pursued with such forceful vigour, and to confer on the Native Authorities the privileges of power and honour that makes it worthy of the respect and dignity of rule. The Governor General, Sir John Maffey, issued a Memorandum in January 1920 to Governors and DCs to observe that: "be prepared to grant a worthy scale of remuneration to the chiefships we foster, in the confident hope that we shall thereby be saved in the long run from costly elaborations of our own administrative machinery (Sir John Maffey, cited in Mac Michael 1935: 195). The policy bore fruits, and an unprecedented record of stability, and law and order eventually maintained. Peace prevailed over the country that was a necessary prerequisite for the stability of trade which was the government's ultimate goal. Law and order prevailed in the country.

That a woman could go unescorted to the well, or return after dark from the market laughing and chattering with her sisters, that a man could travel long distances unarmed, that robbery and house-breaking were rare and the offenders usually caught and punished ... all these things were still a positive good in their eyes. They came afterwards to be accepted as normal and when breaches of the peace did occur Sudanese public opinion was shocked at incidents which would pass unnoticed in Damascus or Baghdad (Henderson 1965: 50-1).

The system of Native Authorities successfully checked tribal disorder, feuds, and frequent forays. Thus, security and stability were maintained for the smooth and lawful looting of the rural resources by the colonial government through the collaboration of the native authorities. The critical issue about this collaboration for Sudan's political future is that it has created a tribal aristocratic class allied to the state. In Gaitskell words: "pursued to its logical conclusion, this policy had an affinity with the oil and *Sheikhdoms* of the Middle East and it carried the great danger of corrupting traditional authority rather than revitalising it, producing Pashas in Pakaeds rather than a progressive peasantry" (Gaitskell 1959: 103). This has meant for the political future of Sudan that the colonial state had established a system of tribal aristocracy whose members were so moulded in the colonial image, established, privileged and were placed in positions of material power to succeed to the seats of power after their departing colonial patrons.

4- 1- 2- Colonial Agricultural Policy:

The Condominium agricultural policy in Sudan, circumscribed by the postulates of the British colonial policy for self-sufficiency, advocated a commitment to expand internal and external markets as a condition for the generation of revenue. The general agricultural policy made the following commitments in the words of Tothill, the Director of the Sudan Department of Agriculture and Forests:

... the present agricultural policy of the Sudan may be said to be designed to bring about social emergence of rural communities. Food crops are encouraged which are designed to produce an ample food-supply and a well-balanced diet; the production of an adequate milk-supply is almost as important; the provision of good drinking-water and of fuel and of building poles is also encouraged. With these things satisfied the emphasis is placed on a cash crop to be fitted into the rotation; this crop is designed to produce money to enable the cultivators to pay taxes and to purchase those trade goods required for participation in the benefits of civilisation. The aim is to bring about the emergence of happy and prosperous rural communities rapidly becoming fully literate, financially able and mentally wishing to participate in the advance of civilisation (Tothill 1948: 2-3).

This statement on the principles of the colonial agricultural policy makes interesting reading. Clearly it points to the express objective of drawing the Sudanese rural economies which had hitherto been autonomous into the world market economy as denoted by the term "the social emergence of rural communities". This had specifically meant, in the general context of the colonial development ideology, the drawing of the Sudan's rural economies into the British sphere of economic activities. The process of integration will have to be effected on three spheres. First; to establish the base for food production as a necessary prerequisite creating the material conditions conducive to rural production of a healthy, able-bodied agricultural labour force who can then; secondly, work the land to produce cash crops to export to outside markets; and, thirdly; provide a broad and thriving consumption market for the imported British-manufactured goods.

Looking into the stated objectives of the colonial agricultural policy, it became clear that the stated commitment to "produce an ample food-supply" was never seriously followed beyond a limited scope, and only confined to the centre of the country, especially *Khartoum* area. A diary farm was founded by the Veterinary Department in 1907 mainly to cater for "the demand which always exists in a British community, wherever it may be, for a good supply of clean milk" (Tothill 1948: 654). Other experimental work included nursery for palm date propagation and some rudimentary experimental work on rice (Ibid 323-24). "In this actuary the late Col. E.S. Jackson set a good example in date culture in his garden at *Mansurkotti*, and in 1935 Mr. T. D. Bevan, who had worked with Col. Jackson, became date expert. to the government to set up nurseries and begin the drive for good date propagation among the cultivators. The late Professor Sitas C. Masson did tours of *dura*. In some respects the government attitude

towards the expansion of food production was negative, except when food production was intended for export. There are two instances to testify to this. One, the Governor-General Wingate's first idea in 1900 when he visited the *Gezira* was that the *Gezira* area was an ideal place for producing *dura* on a large scale. He wrote; musing about revenue and irrigation and wondering if the *Gezira* can solve his problem, not by the production of cotton, but by *dura*.

I recently rode across the *Gezira* from Wad Medani on the Blue Nile, to opposite Dueim on the White Nile, a distance of some 80 miles, across a perfectly flat plain, sown almost throughout its entire length with *dura*. ...if a system of irrigation were feasible in the *Gezira*, It would become a huge granary capable of supplying not only the whole Sudan but other countries as well. (Wingate- cited in Gaitskell 1959:36)

Unfortunately, as far as food security was concerned, the events outside Sudan were to determine the future development of the *Gezira*; cotton was to be the export product of the *Gezira*, not *dura*. The story of why Sudan since that time continued to commit the best of its lands to the production of cash crops, mainly cotton, while in recent decades millions of its citizens suffered from famine explains much of the nature of the international market relations. In this connection, reference is to be made to conditionalities attached to a massive 1983 World Bank loan to Sudan earmarked for the rehabilitation of the *Gezira* to boost cotton production, at a time when famine was raging in Western and Eastern Sudan. Another example of the colonial government's negative attitude towards food production was the conversion of the government pump schemes from food to cotton-production. The government had a number of pump schemes; four at *Dongola*, four at *Berber*, and one in the Whit Nile, all, with the exception of the latter, were established primarily as "strong points" of defence against famine which were apt to recur periodically in the Northern Sudan (Mac Michael 1935: 302). Although the government advocated a commitment to food production, its practice did not support its statements. But failure to give due concern for a long-term food strategy, sacrificed long-term food security for the short-term concern with revenue generation. The food production systems of rural communities remained as they were centuries earlier. However, food production on the clay soils in the central rain lands was mechanised and supported only as a response to external demand created by the food shortage during the war. Food produced in the commercial mechanised farms in these central rain lands has ever since remained export-oriented.

The colonial government did not seriously concern itself with a long-term food production strategy in Sudan. The government considered that since there was food available to meet people's food needs from their own production, to enable them simultaneously to carry out the task of producing cash crops for export, it assumed irrelevant to develop food production beyond that capacity. The government's main concern was to expand the internal and external markets by developing export crops,

and opening up the internal market for the import of British manufactures. The policy caught the rural farmer in the dilemma of having to divide his/her labour power between producing food for their families and producing cash crops for the market. This dual situation implied a loss for the farmer since s/he has to bear the costs of both production and reproduction of labour, while the buyer of the crop would pay a price that would cover only a small part of the production cost. The buyer has no obligation to make towards the reproduction of labour involved in the production process, as would otherwise be the case in a fully-developed market economy. In the dual situation, the livelihood of the farmer is considered to lie outside the market contract, consequently the costs of labour reproduction are not added to the value of the crop s/he thus produces for the market. This explains the low agricultural prices that are offered to the produce of rural labour. Such prices can be too low to meet even the production costs. Caught in this dilemma, the rural agriculturalist is rendered more vulnerable and food insecure, such if harvests fail cannot buffer their food insecurity, and they suffer as a consequence.

4- 1- 3- The Sudan Famine Regulations

The British instituted Famine Regulations; a set of elaborate procedures designed to act as preventive measures against famine, and to combat its effects if it occurred (for more details see Shepherd 1988). The set of regulations and procedures, however, were rarely enacted since during this period from the time the Regulations were set in force in 1920 until the departure of the colonial administration in 1956, the food situation in Sudan was generally good, and an abundance of food was made possible by a generally favourable climate during this period (Nicholson 1991; Tothill 1948). The Famine Regulations have existed ever since, but they have been completely overlooked, and never activated during national rule, which suggests the extent of lack of responsibility of national Sudanese governments towards their citizens in the marginalised regions.

4- 1- 4- The Import Trade:

The import trade was greatly enhanced by the increased money supply that became available to the people from the sale of their cash crops. By 1950, people's life styles and consumption patterns have radically changed from simple subsistence to one increasingly dependent on the market goods. Indeed, opening up internal markets "to purchase those trade goods required for participation in the benefit of civilisation", in the words of the Director of Agriculture, was one of the principal pillars of the colonial ideology. In the *Gezira*, for example, where money supply became readily available in the hands of ordinary men and women, averaging £E 800 per tenancy, the whole scale of values, of needs and wants had been thrown upwards by the simultaneous flood of

money and consumer goods. The encouragement of consumerism at this scale in a society hitherto agro-based with little knowledge of the value of money proved to be dangerous since it transformed the society into a consumer market only. Gaitskell vividly describes the extravaganza in the *Gezira* in the 1950s:

Both income and expenditure rose to a scale hitherto unknown, and everyone engaged in a vast spending spree. After the satisfaction of priorities in food and clothing, social occasions stood out as pre-eminent in the state of values. In the general prosperity thousands of pounds went in the pleasures of social display, thousands more in wild competition for goods and services in limited supply, - a scramble in which prices soared and money went to waste like water. ... Taxis crammed with well-dressed tenants sped from village to village. Scores of lorries carried the less opulent on their social errands . The markets were crowded with eager customers for goods of all sorts, the beer shops crammed with eager patrons. many more people than before took out trading licences, competition for flour-mill sites, ferry rights and the like sent auction prices soaring to fantastic heights (Gaitskell 1959: 317-18).

The money surpluses that would have been wisely invested in developing more complex forms of economic activity, have instead been directed towards wasteful conspicuous consumption. This strikes to the core of the colonial development project which encouraged consumption and inhibited economic development to go beyond a certain level. While it encouraged the production of primary commodities, and encouraged consumption, it did not allow capital surpluses to flow into secondary and tertiary economic activities; i.e. processing and manufacture. Inhibition of industrialisation in the colonies was a set colonial policy on which there was unanimous agreement among all British parties, Tories, liberals, and Labour alike, all stressing "Complementarity" between the colonies and metropolis: "[T]he economic ideology of the period required both that colonial development be confined to forms of production which would not compete with manufactures and that colonial consumers prefer British commodities however uncompetitive (Brett 1973: 75). Colonial industrialisation was therefore opposed in preference for the principle of complementarity and elimination of competition. The prospects of investing the money surpluses that were accruing to local Sudanese in setting up manufactures and industries thus blocked, these surpluses had been wasted in conspicuous consumption, flown into more horizontal expansion of primary production, or found their way into petty trade as merchant capital, appropriating surplus rural labour.

The colonial administration did little to develop traditional rain-fed agriculture, especially in those regions away from the *Gezira* and the Nile strip. The little that was done, however, was mainly for a concern of drawing the produce from the hinterland into the market. Therefore, markets were developed and organised in many local towns, *El-Obeid*, *En-Nuhud*, *Um Rwaba*, *Tendelti*, *El-Rahad*, *Deleng*, and *Kadugli* in *Kordofan*. These were linked with the main port by the railway line both to carry

produce and man-power from the hinterland. Steamer services were also established to link the Southern regions with the Port for the same purposes. Other colonial developments also included the promotion of sorghum production on the Eastern clay plains near *Gedarif*. This development came as a response for the colonial need for food supplies to cater for the allies' armies during the war.

In summary, the colonial project in Sudan came as a response to the political needs and strategic objectives of the colonial power. There was little concern for integration or linkages between the different sectors of the economy, and little concern for regional balances and integration into a wider national system. The traditional systems which hitherto characterised the Sudanese natural economies, were undergoing profound forces of change under the sway of capitalist penetration and incorporation into the new market exchange relations. The result was that certain regions were being developed as modern enclaves, others were left behind. The national governments in the post independence era thus came to inherit a situation characterised by deep rifts and structural imbalances between regions in terms of economic development, social services, levels of health, education and employment, wide income disparities, in general standards of living, and most importantly, in the tempo of social change that was accompanying the processes of modernisation and transformation. In this last regard, the central regions - already relatively developed on modern capitalist lines- were thus better placed to attain higher levels of development and capital accumulation while the other undeveloped regions would relapse even further. The end result is ever widening gap between the two sectors leading ultimately to national polarisation between the developed and undeveloped; between rich and poor. In the final analysis, this is a case of polarisation and social differentiation between regions and social groups. Successive national governments did little to change the situation (Niblock 1985; Woodward 1986). However, this is not because of ineptitude or sheer self interest, as Niblock and Woodward argue, but rather has to be explained in the context of Sudan's external relations and influences affecting government's decisions on development planning choices.

4- 2- National Rule

4- 2- 1- Post-Independence Era:

A commonly held thesis about Sudanese politics is that successive national governments have consistently perused economic and developmental policies that have neglected the traditional sectors, fostered regional and social inequalities and ignored the interests of the masses of the peasantry in rural areas for personal or group interests. And that these policies have favoured the urban elites of central/urban Sudan; those

groups of merchants, religious and tribal leaders, of military officers and bureaucrats, who form the core of a national bourgeoisie and the guardians of political power throughout the modern history of Sudan since independence (Niblock 1987; Woodward 1990; *Khalid* 1985). Niblock, the most prominent proponent of this thesis, expresses the view that:

those who framed government policy were not inclined to undertake a radical reformation of the country's socio-economic structure. The two kinds of imbalance or inequality which had become prominent under the Condominium - differentiating both regions of the country and social groupings within it - continued and, indeed, became more marked. ... Those who ruled Sudan over these years sought to develop the country within the socio-economic structure which they had inherited from the Condominium era, with minor changes. The interests of the incipient bourgeoisie found expression in the framework set by the Sudanese establishment. Ever-deepening problems arose, however, as a result of the perpetuation and intensification of the two critical imbalances in the system (Niblock 1987: 204).

Contrary to this thesis, and conceding the fact that socio-economic structures remained unchanged, the present argument offers a different reading of the rationale of Sudanese state policies of development. We argue that the Sudanese leaders in the post-independence period have invariably pursued and maintained the colonial policies and structures unchanged for different reasons at different periods under different external influences. The present argument challenges the view that personal interests of the early Sudanese leaders have been the primary motivation which underpinned the maintenance of the colonial development planning in the period of the 1950s and 1960s, but is certainly true for the subsequent decades since the military take-over by *Nimeiri* in 1969. The present discussion is to argue that the apparent unchanging structure in the Sudanese development policy and planning since the colonial period can be understood to be a reflection of external influences, and agenda of development imposed on Sudan from outside interests. Instead of a "personal-interest" drive, it is possible to distinguish between different driving forces underpinning the political choices and attitudes of political leaders towards social and economic development of the peasantry in the rural areas. Three different moods have prevailed in three successive periods which have characterised political attitudes towards rural development in Sudan. (1) A first period, there had prevailed the same nationalistic feelings which inspired the struggle for independence, have also characterised the post-colonial years, and the national policy programmes for social and economic development in the 1950s and 1960s came to reflect this nationalistic mood. (2) A second period, coincided with the decade of the 1970s, in which the nationalist fervour gave way to a narrow concern for the politically volatile situation in the urban centres, who decide the fate and future political survival of governments in *Khartoum*, gave rise to "urban biased" policies. (3) In the third (and current) phase, the concern of the state has shrunk to a concern for its day-to-day

political survival. We trace these three phases in the changing mood which characterised development planning in Sudan in the post-independence era, and in so doing, provide the context within which the marginalisation of *Kordofan* may be explained.

In view of the preponderant role of the state in the process of capitalist expansion as enacted through the various development strategies, it is necessary to examine the character of the state, its external connections and ideological persuasions; the interactions between the type of development strategies pursued, the internal forces and external alliances that influenced the state's decision-making, and the manner in which development strategies have been designed and implemented to service external interests, as well as the interests of certain internal power blocs at the expense of subordinate groups.

4- 2- 1- *The First Period: 1950s - 1960s:*

4- 2- 1- i- *The Character of the Early Sudanese State:*

The early leading political elite was an agglomeration of diverse social groups, but who nonetheless was ultimately united as the main hegemonic cultural core by a common cause: to lead the struggle for independence and modernisation. The interests of this rather heterogeneous mix were variant and sometimes conflicting. The only binding force was a universal commitment to the cause of independence and national state building; although they lack a common ideology that would have informed policy-making and bound the state to a strict programme of development to follow. However, after independence has been achieved, the contradictions inherent in such diverse an amalgam makes it difficult to sustain in the years to come. The formation of a core strata in the centre benefited from the liberal attitude of the colonial administration with regard to the espoused civil liberties of expression and political and social organisation. The removal of restrictions on political organisation paved the way for the emergence of the "White Flag League", composed mainly of educated Sudanese and comprising other nationalist elements: the intelligentsia, a bureaucratic and economic elites, was a political organisation of far-reaching significance; but one which from its inception was strongly urban in character. Insofar as its members came to represent different forces in the nationalist movement, but a common denominator is their common commitment to the national cause, notwithstanding their urban background and aspirations. And when these elements subsequently came to dominate the political scene in Sudan, and the economic domain, their views and perceptions with regard to social and economic development have naturally been influenced by their common aspirations and biases.

The early Sudanese political leaders received an education that was conditioned by the intellectual climate prevailing at the day; that underpinned by liberal philosophy and

thought, it could be hardly surprising that their perceptions concerning social and economic development were not in any way different from those of their departing colonial predecessor educators. They thus came to pin their faith in a "laissez-faire" free market philosophy and liberal politics. And since they were inspired by the "modernisation" theory prevailing at the day, their main concern was a commitment to the rapid building of an "advanced and modern" state. The ambitious liberation project for advancement and modernisation necessarily required the mobilisation of vast national resources for its implementation which can only be generated from the rural masses of the peasantry. These were considered to be unavoidable sacrifices to be made by the peasantry in the process of the nation-state building. In this climate, when the new social forces assumed political power at independence, they invariably continued the same economic development paradigm that had been laid down by the colonial administration; namely that of continued support for the core enclaves of economic and social development in the Centre of Sudan, in the *Gezira*, and along the Banks of the Nile; to which core the diverse rural economies in the peripheral regions are subordinated to provide cheap labour and cheap resources. In another direction, the perceptions and outlook of the emerging urban ruling elites with regard to social and economic development involved inherent conflicts, in which they saw themselves as the progressive elements in society leading social and economic change to modernisation and advance. Consequently, their perceptions towards development of pastoral and nomad communities are prejudiced by notions that these communities are kept backward by their traditional tribalistic structures and values which are considered to be detrimental to progress and modernisation. As a result, policies have been adopted and diligently pursued of resettlement and reorganisation of pastoral and nomad communities designed to effect permanent transformation of rural communities. For the first time, the rural communities witnessed the provision of social services, of education and health, and the politicians were held to be generally accountable to their electorates. This explains the rationale for the post-independence policies which squeezed the peasantry for the collective "good" of the nation-state. This is what is referred to in the literature by the "collective rational choice" theory (Bates 1981, 1983).

This explains why the early national governments that took over power from the colonial administration maintained the colonial economic structures unchanged in order to build the state, but which simultaneously also continued to be subservient to the interests of the metropolitan power. Successive national governments, however, maintained those structures unchanged with different motivations, reflecting the changing climate of external influences. The *Gezira* Scheme, for example, is essentially a colonial construct, and has remained so ever since. That is; it has remained essentially a project that provides raw material for outside markets. The Sudan economy has for

long been dependent on cotton exports for its foreign exchange earnings which are vital for the process of state-building. The inherent dangers for a monocultural dependent economy are all too well known: the risks of unreliable harvests and yields, the unpredictability of external market conditions and price fluctuations, competition from other producers, to mention a few constraints. In all, it leaves a legacy of a precarious dependent economy which will be overwhelmed in the event of turbulent international economic conditions and/or the vicissitudes of internal physical conditions. The piling stocks of unsalable cotton as the international cotton market collapses, stands testimony to the legacy which bedevils Sudan until today. The question of why successive national governments failed to alter the colonial development structures requires an investigation of the whole planning process in post-independence Sudan.

***4- 2- 1- ii- Early National Plans in Sudan:
(The Five-Year & Ten-Year Plans of Social and Economic Development):***

Planning in the Sudan had a chequered history, with ups and downs corresponding to political changes taking place in the country and in response to influences from outside. Although planning has existed since independence in 1956, it has failed to be institutionalised, mainly due to continuing political instability caused by internal as well as external factors. Fluctuations in the planning policy caused discontinuities and plans were disrupted or abandoned essentially in response to changing political circumstances and external alliances. The first plan to be drawn for the Sudan was made in 1946, when a *Development- Priorities Committee* was established to examine the projects launched for post war reconstruction and to decide on priorities with regard to their execution. The Committee proposed the First Programme of Development (1946-51) consisting of public sector projects amounting to £S (Sudanese Pounds) 13.8,000,000. In 1949, in anticipation of the preparation for the independence, the status of the planning Organisation was raised to a *Capital Expenditure Committee* of the Executive Council. At the expiry of the First Five Year Plan in 1951, it was considered necessary to re-organise the planning machinery, in preparation of the next Five Year Plan. A *Development Committee*, formed from among the members of the Executive Council was created with wider terms of reference. It was required to undertake an overall survey of natural and other resources in the Sudan and to make proposals for long-term strategies to conserve them and to improve the standard of living of the people. The result was the Second Development Programme (1951-56), with an estimated investment of £S 24 million. Like the First Programme, the Second one also covered only public sector projects. The two Development Programmes led to some significant expansion in educational, health and administrative services, and the rural communities tasted the fruits of independence for the first (and last time). From 1956 up to 1960, the

plan was running according to its scheduled programme, and only annual budgets were prepared.

The new government of General *Abboud* which came to power in 1958 through a military intervention was anxious to boost up planning and launch more ambitious programmes of economic and social development. Accordingly in 1960, a comprehensive Ten Year Development Plan (1961-62 1970-71) was drawn with an investment of £S 565 million of which the public sector accounted for £S 337 million or 59.8%, and the private sector £S 228 million or 40.2%. This was expected to generate an annual average growth rate of 5.2% in the GDP. An elaborate planning machinery was created at different levels to provide the necessary support for the Plan.

4- 2- 1 iii- Implementation of the Plans:

Unfortunately, the Ten Year Plan failed to deliver the goods for the public, essentially for political reasons, partly because of its abrupt suspension in 1964 following the popular October Revolution, and partly because of the turbulent political climate that followed in the latter 1960s on the assumption of power of a parliamentary government. The rivalries between political parties, and wranglings over power, favouritism, and clientism, were rampant, and the political leaders became more concerned about winning political support than with the implementation of long-term planning policies. This led to ineptitude and mismanagement, to the extent that the Plan did not produce an official evaluation report. Added to this, timely information from the ministries were not forthcoming. The Ministry of Planning reported in 1972 that "It is to be noted with concern that many of the ministries and departments do not submit, as requested, the underlying reasons and obstacles inhibiting the effective execution of their respective projects" (Democratic Republic of the Sudan 1973: 93).

The Plan failed to materialise, inspite of the fact that the financial investments were maintained; there were serious shortfalls in agricultural and industrial sectors. Lack of finance, or at least the domestic finance which is often cited as a major reason for the shortfalls in targets, was not a problem in the Sudan during the Ten Year Plan period. The causes of the failure of the Plan were obviously political rather than financial or administrative, having to do with the predominance of a new type of politics; of clientism and favouritism to ally certain powerful urban interests in the centre of power whose support was indispensable in the hot political climate after the dissipation of the unifying force which characterised the liberation struggle. From this time on, the forces of power became conscious of the political danger of the urban populations. The resultant popular discontent about the government failure paved the way for the military take-over under the leadership of *Nimeiri* in May 1969.

4- 2- 1- iv- Taxing the Peasantry for State-Building:

Although traditional agriculture remains the major contributor to the national economy in terms of the rates of returns of foreign exchange earnings, its supply of labour (of 70%), and its contribution to GDP (of about 40%), it continued to be taxed heavily in order to subsidise and expand other sectors of the economy, especially the modern agricultural sectors and industry that are deemed necessary for the building of the modern Sudanese state. Therefore, we see that shortly after the departure of the colonial administration, the *Gezira* Scheme was nationalised and enlarged considerably with the opening up of the Managil Extension. In the Ten-Year Plan of Economic and Social Development (1961/2 - 1970/1), the concern was still focused exclusively on large-scale projects. In this Plan, cotton production figured high in the priorities as evidenced in the new extensions. And a recognition of the risks inherent in the dependency on the cotton monoculture, induced a shift in planning towards intensification and diversification of production to include wheat and groundnuts (Shaeeldin 1986, Abdel Salam 1986). Mechanised farming was also considerably expanded. Large tracts of land (of 1500 farm units each) have been allocated to groups of agrarian farmers, bureaucrats, and some army officers following the government take-over of the private cotton schemes along the Nile with generous compensations to the owners who then saw the opportunity of investing their money in mechanised food production. Under the circumstances, the Mechanised Farming Corporation was set up in 1968 to regulate the farming allocations and to cater for the investment needs in the new projects. This period also witnessed the proliferation of agro-industries such as sugar plants, oil mills, flour mills and textile industries, reasonably distributed throughout the country. The capital investment costs for the plan were envisaged to come mainly from domestic sources both private and public. The public sources were to be drawn from budget surpluses which recorded about S\$ 60 million at the beginning of the plan. About 26% of the total required finance was expected to come from external sources (Gad Karim 1988).

It is in this context that we can understand the lack of concern for and neglect of the rural producers in traditional sector in *Kordofan*. According to the Plan, the traditional sector has been accorded only a subsidiary role to provide the necessary cheap labour force required for the modern sectors; and also as a permanent pool of cheap sources of exportable products that are necessary to generate the foreign exchange earnings to subsidise the modern capitalist ventures.

External influences had little role in the early independence period. Until about the end of the 1960s, investment capital was in the main derived from domestic sources. International capital was limited to the domains of commerce and the import/export

trade. In the Ten Year Plan, private foreign investment was about £S 22 million, coming to only 4% of total investment. Foreign capital investment did not have a decisive edge on domestic politics during this period. However, since about the late 1960s, and in the subsequent decades, external interests were to have a commanding voice in domestic politics, and planning options.

External influences fell on a fertile soil, since the conflicting interests within the ruling establishment turned into intense political rivalries between the two major political parties; the Umma Party and the Democratic Unionist Party (DUP) which came to dominate Sudanese political life. The Umma Party derives immense political support from its broad bases of the Ansar, especially in Western Sudan and White Nile provinces. The leadership of the Umma Party in the Centre represents the interests of the indigenous agrarian bourgeoisie. The DUP, on the other hand, derives its support from the *Khatmayia* bases, especially in Eastern and Northern Sudan provinces. The leadership of the DUP in its turn, represents the interests of the merchant capitalist groups (Woodward 1991, 1988, Niblock 1985, Ali 1991, O'Neil 1985; O'Brien 1985). The political rivalries, the conflicting interests, and the wranglings over state control and spoils arising from them have plagued the Sudanese political environment, and favouritism and clientele politics started to emerge, all favouring strong urban interests. The central core elite which led the cause for independence, now distanced from the concerns of the ordinary people, became more conscious of their own affiliations and stakes in power. Pressures thus came from different quarters. Divergent forces of both local and external origins; of capitalists and local industrialists came to push in different directions; each demanding for favourable investment conditions thus added further complications to the entangled mix of the Sudanese politics. In this climate, the organisation and promotion of the Industrial Development Act (1967) came as a response to pressures from the industrialist lobby. The Act made big provisions and generous concessions aimed at fostering industrial development by supporting industrialists at the expense of the masses of the rural poor producers. The wranglings and conflicts between these factions plagued political practice and seriously damaged the government credibility and undermined the people's confidence in it as the discords became all too flagrant. The country was running into economic difficulties and political gloom. Those were the circumstances which prompted the military to seize power by the Free Officers Organisation led by General *Nimeiri* in May 1969.

4- 2- 2- THE SECOND PERIOD: 1970s:

In the second stage, the grand hopes of the post-independence era dissipated, and gave way to disillusionment as the battle for independence which inspired all the nationalistic fervour had been completed, and the rulers and ruled came face to face with

the realities of the internal situation. This second stage which coincided with the decade of the 1970s, witnessed a true "urban bias" which in fact started since the late 1960s, and came to characterise political attitudes and decisions on social and economic development. The change can be understood in the context of the interplay between the national and international power relations. The decade of the 1970s witnessed the height of the neo-imperialist era and the linkages of the weaker economies to the international capitalist system through a strategy of aid and trade. During this period the capitalist centres of power strongly encouraged policies of urbanisation, since urbanisation was considered "good for big business", big projects, dams, electricity and power generation, telecommunication infrastructure, highways, the car industry, the international food industry, etc. As a consequence, aid has been tied to services and infrastructural projects favouring urbanisation and the urban elites, with the negative bias of reinforcing the gap between the centre and the rural peripheries. And insofar as the leaders of political power are mostly from urban backgrounds, they hailed the new trends with joyous enthusiasm. The "urban bias" approaches which have characterised development policies during the period of the 1970s are however more correctly to be understood in their proper context as "externally imposed" agenda of development, than a deliberate choice of the urban-based ruling elites. The national state development policies during this stage exploited the peasantry and the rural masses extortionately not for the benefit of the state, as in the first stage, but for the benefit of powerful urban elites; economic, bureaucratic, industrialist, agrarian elites, who became locked in the hot pursuit of the spoils of the state coming from externally-financed and supported development projects. This period offered no benefits or returns for the rural masses as had characterised the period before it. This stage can best be described by a process of massive drain and transfer of resources from the periphery to the centre, which explains the wholesale impoverishment of the rural communities and the enrichment of the urban-based elites. It is this impoverishment and exploitation that ultimately translated into widespread rural poverty and made the local populations extremely vulnerable to conditions of stress and famines. The *Nimeiri* era passed through two distinct phases: in the first phase planning policies followed a strict socialist orientation groomed by the Eastern Block; then followed by a complete reversal towards a strict capitalist market economy patroned by the West.

The *Nimeiri* government in 1969 had a new agenda and a radical vision for change embracing a socialist model of change and development. A broad coalition of forces; workers' unions, farmers' organisations, professional trade unions, tenants, and national capitalists, all came to play a vital role in the society and in the economy hailing the new socialist spirit and championed by the new government. The coming of the new government ushered a new era of centralised comprehensive planning. Under its

socialist programme of economic and social development, the government gave planning a prominent place in the governmental hierarchy. The government control over the economy increased considerably through large scale nationalisation of private industrial, commercial and banking enterprises. A new full-fledged Ministry of Planning was created for co-ordinating the work of the next Five Year Plan. A team of Russian experts was attached to the Ministry of Planning and a number of Sudanese intellectuals sympathising with the Communists, were put in prominent positions in the planning Organisation.

4- 2- 2- i- The Five Year Plan (1970-71 -1974-75):

The Five Year Plan (1970-71 - 1974-75) which was almost entirely the creation of the Russian team of planning experts aimed at an investment of £S. 385 million and an average annual growth rate of 7.6% in the GDP. The highest priority in the Plan was given to services and construction accounting for 33.3% of the expenditure, followed by agriculture (27.6%), industry (15.7%), transport and communications (15.7%). However, the Plan did not live its full life, as dramatic political events caused a radical transformation in the spirit and direction of the plan. In July 1971, the stated involvement of the Communist Party in the attempted coup against *Nimeiri* by *Hashim Al Ata*, put a halt to the ascendancy of planning. The Russian planning team was forced to leave and a number of senior officials associated with planning were "purged.", and the status of the planning Organisation was downgraded. Although as a result of these political events, the Five Year Plan (1970/71 - 1974/75) was not completely abandoned, it lost its force leading to deterioration in the achievement of targets. Partly to meet the new needs of self-sufficiency and partly to demonstrate a break with the earlier strategy of the Five Year Plan, an Interim Action Programme (1973-77) consisting of a number of schemes to make the country self-sufficient in sugar, textiles, jute, etc. was superimposed on the Five Year Plan in December, 1973.

Table 1 5-Year Plan Initial & Revised Investment Allocation (£S. million)

SECTOR	INITIAL PLAN				REVISED PLAN			
	Private	Public	Total	%	Private	Public	Total	%
Agricultural	26.5	80.0	106.5	27.6	26.5	124.5	151.0	25.0
Industrial	2.4	36.4	60.4	15.7	24.0	67.8	91.2	15.1
Transport & Communication	31.0	29.6	60.6	15.7	31.0	129.3	160.3	26.6
Power	-	12.8	12.8	3.4	-	18.6	18.6	3.1
Services & Construction	-88.6	44.1	132.6	34.4	88.5	72.2	160.7	26.7
Technical Assistance	-	9.8	9.8	2.5	-	11.9	11.9	2.0
General Research & Southern Region	-	2.3	2.3	0.7	-	9.2	9.2	1.5
TOTAL	170.0	215.0	385.0	100.0	170.0	432.0	602.9	100.0

Source: Economic Survey 1973: 111.

Consequently the investment of the Plan was increased to S£ 603,000,000 and its period extended to terminate in December 1977. The priorities in the process have also changed, as is evident from the following investment allocations: On the "Rahad Project", against the plan allocation of S£ 40,374,000, only 2,460,790 were spent in 70-74; the Department of Industry's performance was S£. 8,046,202 out of S£107,660,000; in the Sudan Railways which are often blamed for holding up the pace of development, out of the Five Year Plan allocation of S£. 47,954,266, only S£ 7,845,748 were spent in 71-74. In the financial year 74-75 an allocation of 22,000,000 was earmarked which meant, what the Railways spent in 4 years, they were now required to spend three times that amount in one year. Unless some major administrative and technical changes take place, this effort is considered by many as beyond the present capabilities of that organisation. The story of the Roads Department is also not different. Their performance was 9,037,967 out of an allocation of S£ 129,274,000. The only Ministry whose allocation and expenditure matched was the Ministry of Finance. Commenting on the sectoral performance, the Economic Survey (1971) remarked that out of "327 projects envisaged for construction in 1971-72, only 228 of them were under execution. Only 131 projects of the latter have utilised less than 30 per cent of the annual allocations. Using less than 30 per cent executions as a measure.

It is necessary to examine the structure and organisation of the Sudanese military establishment in order to appreciate and understand the direction of the Five Year Plan of 1970/1 - 1974/5 and whose interests it is likely to serve. The army officers who seized power following the coup d'état in May 1969, as generals of the military institution- in fact were themselves members from the privileged urban strata of the Sudanese society, and were therefore mostly kins of the dominant central riverine groups. This has become an established power structure characterising the Sudanese military institution; namely that the ranks of officers and generals has traditionally been recruited from amongst the members of the urban strata of central riverine Sudan, whereas the mass of the rank and file of the army have traditionally been recruited from among those from peripheral marginalised regions, especially from the Western and Southern regions (Umbadah 1988). The military therefore can be seen as having a strong urban base with connection to the dominant civilian political establishment. This indeed explains the universal phenomenon in Sudanese political history of the cyclical alternation between urban-based civilian and military rule, such that the shifts in power from the one to the other have never moved away from the urban-based groups, and has never represented the interests of the rural masses in any true sense. This in turn

explains why there has not been a radical departure from old power structures, but what can be understood as temporary transfers in the general rules of the game within the urban-based dominant power bloc itself. This has been done in different circumstances either through tacit approval, connivance, and in certain cases by actual handing over of power to the military. The import of such cyclical transfers within the dominant ruling urban class in the centre is to ensure the firm and permanent grip of the dominant establishment over the reigns of power, alternatively mediated between its civilian and military organs. Military intervention to seize power, therefore, functions for civilian governments as a safety valve to maintain the status-quo when this is threatened by pressures and demands from below, and thereby defend precisely the interests of the dominant hegemonic groups of North-central Sudan. At critical times when pressures and demands from the marginalised groups prove too great and irreconcilable with the perceived hegemonic ideology; demands that nonetheless cannot be dismissed in a democratic environment of rule, and the status-quo is put into jeopardy, civilian leaders of the political establishment repeatedly resorted to the military to bring matters to a dramatic military conclusion.

It is in this context of the social bases of political and military power that we can aspire to analyse and understand the orientation of different development and economic policies, and in effect the interests of the social forces underpinning them. Going back to the early years of the *Nimeiri* military regime and its ostensibly proclaimed socialist model of development, the Five Year Plan of 1970/1- 1974/5 reflects the interests of the social forces that formed the new government. In broad terms, the salient features of the Plan emphasised a commitment to a socialist centrally-planned economy, with the public sector accorded a leading role in development. The private sector was seen as a subsidiary component and was envisaged to contribute about S£ 170,000,000 of total investment over the plan period (Gad Karim 1988). The main targets of the Plan were the expansion of exports and a favourable balance of trade to be achieved through bilateral trade agreements and capital investment loans (estimated at S£ 110,000,000) between Sudan and socialist states and Arab and friendly countries. The Plan also emphasised food self-sufficiency. These policy goals were to be achieved through massive horizontal expansion in agriculture, large-scale farms, agro-industries, and import substitution. The old biases laid since the colonial period were obvious in the Plan. In that the producers in the traditional sector, as in *Kordofan*, were again neglected; the bias being in favour of large-scale projects concentrated in the Central and Eastern regions which were already relatively advanced economically and socially. This had the further effect of reinforcing the already widening regional imbalances; further intensifying the processes of polarisation and social differentiation. Issues such as equitable distribution of incomes and spatial distribution of development projects

were given little attention. In practice, however, none of the spills that were to accrue from the Plan, was intended for the subsistence producers. The old colonial bias against traditional subsistence agriculture continued unchanged. Indeed, subsistence producers were envisaged to contribute to the fostering of the Plan by way of massive increases in cash crop production, especially in groundnuts. A necessary prerequisite for this to come about was to be through increased monetisation of social and production relations in the countryside. This in turn required considerable finance capital flows into the rural towns in order to draw the rural produce into the market. Therefore, funds from both public and private sources were mediated through the mercantile chain and extended to merchants in regional towns and from these to local village traders.

The policy of horizontal agricultural expansion (in irrigated, mechanised and traditional subsectors) was soon to have grave harmful environmental consequences as manifested in ecological degradation, soil erosion, declining yields, and a generalised rapid deterioration and depletion of the natural resource base on which the rural communities depend for livelihood. As yields continued to fall, the tendency among farmers was to expand into marginal lands in quest for bigger harvests to offset the shortfall in yields. It is only in the Six Year Plan of Economic and Social Development 1977/8 - 1982/3 that the crisis of traditional agriculture and environmental degradation became political issues of concern. It is only in this Plan, that government planners recognised explicitly the importance of traditional agriculture to the development objectives as a whole. In practice, however, "the allocation of public funds did not reflect the new insight" (Wohlmuth 1991: 439).

In the first two years of the *Nimeiri* rule; the traditional political establishment were resentful of the socialist orientation of the state. And they were especially anxious about the nationalisation and confiscations which have affected some of the factions of the bourgeoisie. The *Mahdists* staged a revolt against the regime in *Aba Island* in early 1971 led by late *Imam El Hadi El Mahdi*. The revolt was brutally put down. This event largely alienated the broad bases of the Ansar of the Umma Party whose strongholds are in *Kordofan* and *DarFur* in Western Sudan. These considerations no doubt jaundiced the outlook of the *Nimeiri* government towards the peoples of *Kordofan* (and Western Sudan generally) who were considered dangerous pockets of regressive sectarianism, of resistance and opposition to the new social forces. Such apprehensions and fears, overlaid with historical racial prejudice, may have influenced the decision-making process against the Western provinces over issues of development, equity, and resource allocation. The neglect and marginalisation of *Kordofan* in the share of national resource allocation during the *Nimeiri* era were to be understood in this context. The processes of polarisation between regions and social classes already pronounced have been accelerated tremendously.

The socialist experiment did not last for long, as important political turbulence brought it to an abrupt end. As part of the continuing struggle for control over state power, a communist-led coup within the Revolutionary Command Council (RCC) led by General *Hashim El Ata* seized power in 19 July 1971. But the coup lasted only for three days. The coup was aborted mainly due to external influences, in particular the crucial role played by Lonrho and its Director; Tiny Rowland who possibly caught wind of the events from Western Intelligence sources, helped *Nimeiri* regain control (Cronje, Ling and Cronje 1976: 178-83). The leaders of the coup were executed with some brutality. In retaliation, *Nimeiri* immediately expelled the Russian advisers, and relations with the Eastern bloc rapidly deteriorated. This event marked *Nimeiri's* round swing to the Western bloc, especially towards the United States (Barnett 1988; Gad Karim 1988; Hussein 1988; Gordon 1991; Brown 1991; Woodward 1991; Shaadin 1986). From then on, *Nimeiri* moved Sudan progressively further into the Western orbit in general, and towards the US in particular. The sole political party, the Sudanese Socialist Union (SSU) became socialist in name only. The economic policies became increasingly *laissez-faire*, particularly in the latter years when *Nimeiri* copied Reagan and Thatcher by embarking on a sweeping programme of privatisation and selling out of state assets (Gurdon 1991: 18).

The defeat suffered by the socialist and communist elements paved the way for the complete and uncontested control over the state by elements of the urban-based petty bourgeoisie; merchant capitalists, factions of the bureaucracy in alliance with the military. The period between 1971 and 1976, following the destruction of opposition forces and the weakening of left-wing elements, was a period of continued consolidation and build-up of the new political hegemonic forces. Concomitant with this was a departure from the early socialist-oriented policies and a reorientation of state policies towards a more orthodox capitalist line of development. Thus new development plans were reformulated to reflect the new trends; in 1972 in the forms of the Interim Programme of Action. This was intended to be a preparatory programme which eventually paved the way for a "more conducive atmosphere for foreign investment" (Barnett 1988: 6). The first steps taken towards creating this "conductive atmosphere" to attract foreign investment, involved a programme of denationalisation, suppression of trade unions, and the promulgation of new investment acts. These steps were considered necessary prerequisites leading to the next more crucial stage of the "open door policy" in which the Sudan economy and society were to be more forcefully integrated into the world capitalist system through the linkages of local merchant capital to be nurtured in order to mediate international capital flows (Gad Karim 1988). This mediation between national and international interests has been the function of the state and the social forces controlling it. As Lawrence observes:

it is increasingly clear that the character of domestic class relations and the balance of political forces within the ruling strata play the key role in determining the degree to which external economic interests are well represented. ... Alliances between national and international capital and between international capital and the local state act as a vehicle for continued external domination (Lawrence 1986:5).

Nimeiri's pro-Western right swing marked the beginning of the marriage between domestic Sudanese interests and external capital interests. Initially, the move required the build up of a new power base, centred around the personality of *Nimeiri* as national leader towering over the traditional sectarian leaders of both the *Mahdists* and the *Khatmayia*. A power base that also simultaneously counterbalanced the political weight and influence of traditional sectarian parties which were considered to be inimical political rivals to the hegemony of the new forces. The dual objective for a new power base to create a new national leader and a new dominant political establishment in its own right that undercuts traditional power bases required investment funds to create the new power base politically and to foster it economically. The SSU was formed up by a Presidential decree and allowed to function as the sole political forum in the country. The SSU was a hierarchical political structure of a plethora of feeder tributaries permeating at every level of the society; from village councils, district councils, farmers' associations, workers' unions, youth and women organisations, students' unions, the regular forces, all to feed into the central structure of the SSU which is ultimately accountable to and in absolute control in the hands of the President. The SSU as the sole political organisation of the new hegemonic forces required that it be fostered and sustained economically if it was to stand to its assigned role of superseding traditional sectarian parties

During this period, *Kordofan* continued to be neglected, politically marginalised and economically exploited for the benefit of the urban-based forces comprising the ruling elites (the functionaries of the SSU). *Kordofan* fell out of favour with the *Nimeiri* regime since it was considered to be the stronghold of sectarian politics and to host dissident elements of the Ansar. This period witnessed the mushrooming of the state marketing boards (the Gum Arabic Company, the Oilseeds Company, the Livestock and Meat Marketing Corporation) which all dealt with marketing of *Kordofan* produce. The main objective for establishing these state parastatals was to appease powerful and dangerous urban interests whose support was vital for the political survival of the leadership. It is interesting to note that this period also witnessed massive inflows of tied foreign aid, especially American aid to Sudan; notably in wheat and wheat flour intended for the satisfaction of the "refined food taste" of the Sudanese urban milieaux. Accordingly, members of the SSU gained in economic power by all means, legitimate and illegitimate with the active backing of the state and other external influences, especially the USA, the UK, Egypt and the Arab Gulf States. The SSU had a free hand

in the running of the economy. The state's executive and the President took on the real powers of the Ministry of Finance and the Bank of Sudan (Ali 1982). In order to do so, the government took various amendments designed to dilute and overstep institutional procedures. An example is the various amendments to item 57 of the Bank of Sudan Act which regulates Central Government borrowing. Ali (1982) observes that "[i]n 1973 the Bank of Sudan Act was amended ... to bring the Bank of Sudan under the umbrella of the Ministry of Finance and National Planning. This had the effect of weakening the powerful position the Heads of the Central Bank enjoyed". And that the new appointed Governors of the Bank of Sudan became part of the "general mood at the time", and seemed to enjoy the status of ministers with all the convenience of communicating directly with the Head of the Revolutionary Command Council (Ibid; 22-3).

4- 2- 3- THE THIRD PERIOD: FROM LATE 1970S TO PRESENT:

In the third stage which includes the contemporary period, "urban bias" policies gave way to the "politics of corruption" and "political survival" which have characterised the attitudes of the Sudanese politics since the late 1970s. This is also not in complete isolation from external influences. The aid and trade programme which has been promoted by the Western powers, especially the USA's PL 840 programme, has led to a development fiasco, and resulted into a crippling debt burden on Sudan, estimated by the end of the 1980s to have amounted to US\$ 13 billion. The worsening economic crisis that ensued, has exposed the political leaderships to enormous economic and political pressures from within and without. And in a realistic sense, the leaderships could not have survived politically without some sort of external support, which can only be conditional to follow prescribed policy options. In such critical situations, the political leadership in Sudan, under *Nimeiri* at the time, completely aligned itself to its external supporters against the interests of the masses inside the country. The policy programmes which came to be implemented have been the dictates of foreign power interests, which had to be negotiated behinds closed doors. Corruption became rampant as a result, and the numerous popular uprisings and protestations, have been duly suppressed with savage brutality; and the government's main concern has become its day-to-day survival than any concern with the issues of development or the welfare of the people. it is in this context that the rural masses have been most neglected and exploited to "death" since they posed no threats to the political power in the centre. And when the famine finally came, the rural masses were already too poor, too exposed, too vulnerable, and too weak either to forestall its effects, or make their voices heard in the centre of power, the political leaders can simply ignore their plight. In the context where policies have become expedient measures for political survival, the rural populations in

Kordofan have simply been neglected and left to their fate since they posed no threats to the political survival of those holding the reigns of power. That helps explain why when the news of the famine in rural *Kordofan* in 1983/5 finally reached *Khartoum*, the authorities simply turned a blind eye and a deaf ear to the in-coming news. Even during times of democratic rule, forms of representation under parliamentary democracy failed to articulate the local people's aspirations and translate these into realities, nor their voices heard in *Khartoum*; since party politicians were locked in endless manoeuvres and rivalries, and the pursuit of day-to-day political survival rather than with the concerns of long-term development and the welfare of local communities.

From then on, the economy was run to all intents and purposes to what amounted to a purposeful creation of a new capitalist class, and the period could more accurately be described as the "politics of corruption and political survival". This new class was to be state-built quickly and be made vastly wealthy with the help of the international donor community. The creation of this new capitalist class was to act both as a potent countervailing and destructive force to the already weakened, yet not altogether eradicated, socialist and communist elements. And, simultaneously, as a leading force towards capitalist transformation with a faith and commitment to the free market ideology. It is not surprising to observe that a new ethos was emerging among members of the new social forces who were the guardians of the new capitalist ideology assimilating a new culture of American-styled consumerism (Sudanow 1978). The international donor community through the agency of the state have pushed this trend upwards. The social forces that were leading this process of capitalist transformation were corrupted by the big spoils of money spilling by so many different ways of corrupt practices. The economics of the period can more accurately be described as the "economics of corruption". President *Nimeiri* disclosed to his intimate circle in private that his is a time for riches and quick wealth for those who can play their cards wittingly (personal communication). *Khalid* (1985) recounts the inside story of the flurid details of the drama at the genesis of economic corruption and the emaciation of institutions.

At the time that the Arab states agreed to channel large amounts of money to Sudan as part of a pan-Arab strategy to turn the Sudan into the "breadbasket" of the Arab world (see below), corruption on a large-scale and mismanagement of funds took place. The actors in this "grotesque drama" of corruption included *Adnan Khashoggi*, the arch wheeler-dealer, and the top officials in the People's Palace, Dr. *Idris* being the master-mind of all deals with the tacit approval of President *Nimeiri*. A *Salim Eisa*, a journalist in Beirut did Sudan the disservice of bringing in *Adnan Khashoggi* supposedly to exploit its potential for development. But *Adnan* is a known corrupter. He contributed to Nixon's Presidential campaign to the tune of US\$ 50,000, and one of Nixon's daughters received a bracelet worth US\$ 30,000 from *Soraya Khashoggi*, *Adnan's* wife (*Khalid*

1985: 94). The American Senate Foreign Relations Sub-Committee on Multinational Corporations investigated *Adnan's* handling of military sales to Saudi Arabia (Ibid). The Sudanese ambassador to the United States wrote extensively to *Khartoum* on *Adnan*. But President *Nimeiri* was not impressed. *Adnan* won the President's confidence and friendship; a friendship which cost him little by way of a few trips for the President of the Sudan aboard the 727 and DC9 *Khashoggi's* private planes, fuelled at the Sudanese Treasury's expenses, and some cruises in his yacht, the "*Nabeela*", so named after his daughter (Ibid). With the help of President *Nimeiri* and the Minister of Special affairs; Dr. Idris, *Khashoggi* opened an office for his Company TRIAD in *Khartoum*, employing a number of lawyers and professors to compile and analyse data on Sudan's potentialities for investment. TRIAD was well-placed to come up with offers for all government projects, planned or under construction. *Adnan's* first move came when in 1972 Saudi Arabia agreed to extend to Sudan a guarantee for a US\$ 200,000,000 loan. *Adnan* proposed to the "inner circle" in *Khartoum* that if he is allowed to manage the US\$ 200,000,000, he will be able to attract US\$ 1000,000,000 for the Sudan. "From then on it was not the smaller fry but the sharks who went into business" (Ibid: 93). *Adnan*, given the go-ahead from the President, went on to negotiate a loan syndicated by no less than thirty-one European banks, carrying a high fluctuating rate of interest which reached to 16% in one year, short-term repayable over seven years with three years grace period. In addition, it carried a commitment charge of 0.5% on undisbursed amounts, and another 0.75% semi-annual interest rate. *Adnan* himself received a 2% commission which came to US\$ 4,000,000. The loan could have been secured on much lenient terms; lower rate of interest, with longer repayment and grace periods, had it been handled institutionally. This is only an example to illustrate the extent of corruption and mismanagement of the Sudanese affairs. During this period, the SSU, the single state-sponsored party became a symbol of corruption. An observer concludes that "[i]n short, the SSU became a symbol of corruption and privilege; and the party was run by people whose interests and those of *Nimeiri* were intertwined" (Al-Shahi 1991: 151). The SSU later incorporated elements of the traditional parties after the National Reconciliation, only to make the spills more pervasive.

Coincidentally, it is during this period that Sudan was hailed as a possible bread basket for the Arab world, and indeed a world granary. This has animated great interest in the future prospects in Sudan and consequently attracted huge sums of money from outside. That coincided with an important trend in the international economic climate; namely the new ingenious strategy of recycling the accumulated petro-dollars that have accrued from the boom in the international oil industry. These surpluses, already accumulating in Western financial institutions, are to be recycled through the IMF and World Bank to developing countries (including Sudan) ostensibly for the purposes of

development. The huge surpluses that were accumulating were threatening the stability of the international monetary system; and which therefore called into question the ability of the international market system to absorb these surpluses without creating grave problems. A need for reassessing and restructuring the international monetary system was then called for. Thus the idea of recycling was conceived, which essentially implies that surplus money be allowed to flow to developing countries in forms of Western technology transfers, capital goods and expertise to lead economic growth and social development in the third world in a fashion akin to that of the American Marshall Plan for post-war Europe. That is; the injection of massive investment capital that would lead economic revival and eventual take-off for third world underdeveloped economies. The net outcomes of the "recycling" strategy was that it did not achieve its stated goals of leading to economic revival and development in the third world. On the contrary; it led instead to universal stagnation and economic decline and a debt burden that is paralysing third world economies. What the strategy did achieve, however, is help salvage, though temporarily, the crisis in the Western capitalist economies, especially that of the USA, through the massive purchases of capital goods and technological inputs channelled to the third world. What the strategy did create is a deep global polarisation between rich and poor nations, the North/South divide, and another polarisation/social differentiation within the respective aid recipient states of the third world; thus creating rich and poor social classes. The aid flows and the resultant debt, have created rich capitalist classes and poor marginalised worker classes, both linked to the international capitalist system. In Sudan, these processes of polarisation and differentiation are the more apparently evident and pronounced during the sixteen years of *Nimeiri* rule. But it is more accurately true that the origins of these processes are to be located in the structural relations of the international capitalist system in its totality.

The period of the 1970s was a period when the politics of corruption became the norm. The new emerging hegemonic forces in Sudan under *Nimeiri*, came to take effective control over the state following the destruction of the opposing socialist and *Mahdist* forces in 1971 (Barnett, 1988; Okoje 1983). Their control over state power was exercised exclusively to further their own interests and material gains. It was becoming commonplace the stories of corruption, of commissions and misuse of public funds of the huge amounts of money that were flowing into the country from the international donor community (*Khalid* 1985, 1991). The new hegemonic class which was emerging under the tutelage of the state comprised diverse elements of the petty bourgeoisie; "of merchants, traders and commission men [who] took almost exclusive control of social and political power, and thus of the state, for its own ends. This class focusing on its own needs for accumulation and conspicuous consumption, and amply encouraged by the United States, and to a lesser extent the United Kingdom, for their own strategic and

commercial purposes" (Barnett 1988: 3). This is the ruling class that was to lead the Sudanese society through the very critical and decisive years of the 1970s and 1980s; the years of international upheavals of great magnitude; of economic crises, food crises, oil crises and a gathering international economic recession.

4- 2- 4- Foreign Involvement:

The external influences on the character and policy choices of the modern Sudanese state have been extensive. This has included the role played by the colonial power, and the British-style liberal attitudes towards economic development, to pro-Eastern socialist, then to pro-Western capitalist orientations of the state. These external power influences have left their remarkable impress on the political choices and approaches to social and economic development throughout its modern history. The character of the state therefore cannot be treated in isolation from the external forces influencing it. It is therefore more correct to consider the policy choices with regard to questions of social and economic development of rural communities as a partnership between the nation state and its external allies who can be different at different times. The *Nimeiri* regime became an ally to both East and West who left- in turn- their indelible impress on politics and development. It is during *Nimeiri's* pro-Western overturn following the expulsion of Russian experts after the left-wing-led aborted coup that foreign involvement in domestic Sudanese affairs became an integral part in the running of the state.

Lonrho's role has been crucial in helping *Nimeiri* regain control after the communist-led coup. This role has given Lonrho a leading role in the reorientation of the country towards the capitalist bloc, especially facilitating the articulation of British and US businesses and firms in the country's development share. Lonrho mediated in resolving the sticking question of compensation arrangements between the Government of Sudan and Britain for the British companies which have been nationalised in 1971. It also facilitated the negotiation of a £10 million credit arrangement between the Government of Sudan and Britain's Export Credit Guarantee Department. For its own immediate business interests, Lonrho was rewarded by appointing it as the sole agent for the Government purchases of capital and semi capital goods in the UK. It also secured in 1972 the position of the major European partner in the joint venture of the giant Kenana Sugar Scheme (Gad Karim 1988: 42-3). Following these initial arrangements, Sudan's relations with the Western capitalist powers were restored. *Nimeiri* visited the UK early in 1973. Diplomatic relations with the US were resumed in 1972 after having been severed in 1967 in the aftermath of the Arab-Israeli war. Relations with the Arab Gulf States improved as a tribute to the heavy-handedness with which the government has dealt with the communists, and its general new direction of foreign policy away from

the socialist bloc. These developments and the key role to be played by external influences, notably by the US, Britain and the rich Arab States, as we shall see later, is to have a decisive impact and to leave an indelible impression on the future shape of Sudan's economy and society.

No sooner had diplomatic relations with the US been restored, than the latter insinuated to *Nimeiri* the adoption of an "open door policy", on lines akin to that of the Egyptian *Infitah* policy. The "open door policy" was meant to abolish government's central control over the economy and to open the country to international capital investment. This has implied the promulgation of several acts and political moves designed to create a more "conducive environment" to attract foreign capital. The Interim Programme of Action was promulgated to carry out the new policy objectives.

On another political plain, moreover, Western powers led by the US, Britain and to some extent France played an important role in mediating a peace settlement regarding the Southern Sudan civil war between the government and the leaders of the Southern movement. The USA persuaded *Nimeiri* to settle the Southern problem on the understanding that the continuing state of war undermines peace and stability and therefore is not "conducive" to the era of international foreign investment. If the new redirection of the capitalist expansion were to be carried out in a more conducive environment, the conditions for peace and stability were to be created by ending the war. Thus, subtle diplomatic activity and political suasion inside Sudan between the *Nimeiri* Government and the Southern political leaders, and outside Sudan involving the USA, Britain, France, Egypt, Uganda, Kenya, and Ethiopia, exerting pressures on the contesting sides, all in the end brought the long-awaited fruits of peace enshrined in the Addis Ababa Peace Accord in 1972. The USA and Britain were vigilant to see the peace agreement carried through, therefore have assisted no less generously in the invisible financial costs needed to bring in line the yet recalcitrant reluctant leaders of the movement. The USA, from its part, contributed funds through its USAID programme channelled through a Social Fund, what has come to be known by the "Special Budget for the South". The funds were placed in the hands of the Sudan Government, and supervised over by a senior government official, the then Governor of the Bank of Sudan and Minister of Finance (Mamoun Biheiri) to make the necessary discretionary disbursements, ostensibly towards social development in Southern Sudan. The UK contributed funds through its ODA.

It is also during this period that the *Nimeiri* government with the active support of the USA, Egypt and the Arab States encouraged and supported the Muslim Brothers' Movement (O'Brien 1986) in Sudan to emerge as a countervailing political force to the communists and as a pre-emptive force for any future revival of communist politics in the country. This is in line with the prevailing spirit current in the day of dismantling

socialism and left-wing forces as a necessary precondition for its replacement with capitalism and right-wing politics.

4- 2- 5- *The Breadbasket Strategy:*

The practical conditions were thus being created, political, institutional, and legal, and the foundations laid for firm capitalist expansion of the Sudan economy and the effective integration of the Sudanese society into the wider global market system. The new development strategy that was formulated to embody and express the new trends; the "breadbasket strategy" envisaged a tripartite partnership between Arab surplus money, Western technology and Sudan's resource potential. In essence, the breadbasket strategy was conceived of as a strategically motivated plan intended, as part of a pan-Arabic regional co-operation, to break the Arab world's dependency on foreign sources of food supply, especially from the USA, by developing Sudan's food resource potentials. The plan was thus hoped to provide regionally oriented more secure supplies of food.

The call for a pan-Arab food security programme was echoed in 1975 following the rejection by the USA and major surplus-food producers of the proposal advanced by the FAO for the creation of internationally held food reserves. These surplus-food producers recognised that food was the weapon of the 1980s, just as oil was the weapon of the 1970s, and would in no way surrender this weapon to others. There had been calls in the USA for the use of the food weapon against the Arabs in retaliation for their use of the oil weapon against the USA in the mid-1970s (Awad 1983). The Arab region has been heavily dependent on food imports, especially from the USA. In the period between 1975 - 1985 the population of the region was expected to grow by 33%, while food production was anticipated to expand by 17%. Rising incomes will widen the food gap even further. In 1980 more than half the food consumed in the region was imported at an annual cost of US\$ 20,000,000,000; constituting about one fifth of the region's total value of imports of US\$ 106,000,000,000. The Arab region envisaged a strategy whereby to break its dependency on external sources of food supply by developing the region's internal agricultural potentials. It has been estimated that the arable land in the Arab region is about 132 million hectares, of which only 35 million hectares are actually utilised. The region also has irrigation water capacity estimated at about 215 milliard cubic metres, of which only 113 is actually used (Awad. 1983). The basic idea of the Arab regional food security is to invest the vast surplus of petro-dollars which accrued to the Arab states from the oil boom of the mid-1970s to develop the region's agricultural potential. The idea came as a defence mechanism of the fear for the use of the "food weapon" against the Arabs by their Western suppliers; a fear which became real in the aftermath of the Arab oil embargo on the USA following its stance in 1973

Arab-Israeli War. A movement gained momentum in the USA calling for a ban of food exports to the Arab states, which gave rise to the slogan: "a bushel of food for a barrel of crude" (Ibid). Sudan is well-placed to play a key role in this strategy; since it has 48% of reserve arable land in the Arab region, has 18.5 milliard cubic metres from the Nile waters, representing about 10% of the region's permanent water resources, has 30% of the region's animal wealth, its fresh waters can produce 60,000 tons of fish annually in addition to fish reserves found along its 700 miles long Red Sea shores.

In this context, the concern for future food security of the Arab world has become an urgent political issue. In April 1976 the Arab Summit held in Rabat approved the creation of the Arab Authority for Agricultural Investment and Development (AAAID) with an authorised capital of about US\$ 500,000,000. *Khartoum* was chosen to be the headquarters of the AAAID (Ibid). The AAAID was to start operations in Sudan, where the Arab Fund for Social and Economic Development (AFSED) sponsored a study to assess Sudan's agricultural potential, which culminated in 1975 in the first of the breadbasket programmes: The Basic Programme for Agricultural Development in Sudan. AAAID was charged with the task of helping to implement the Programme. The programme contained 100 projects which could be executed over a 25-year period until the year 2000. At this time the Arab region was importing 6,000,000 tons of wheat annually, 500,000 tons of sugar, 400,000 tons of edible oil, and 135,000 of meat (Ibid; 12). The Programme envisaged large increases in Sudan's production of these items, with a view of reaching self-sufficiency for them in Sudan, and exporting the surplus to other Arab states. The surplus exported from the Sudan was expected to substitute 20% of the region's sugar imports, 48% of its imports of edible oil, and 58% of its imports of meat.

It is doubtful, however, for its own strategic purposes whether the USA would be a willing partner to allow such a plan, dangerous to its own immediate trade interests and long-term strategic goals in the region, to allow it ever to materialise. The plan, moreover, would set a model, if succeeded, for other third world economies of "de-linking" from international economic hegemony led by the USA. In the final analysis, though, the breadbasket strategy was foiled or aborted. As Awad put it:

Top level contacts in 1978 with the IBRD and the IMF led to the freezing of the Six Year Plan and the introduction of the Programme for Economic Stabilisation and Financial Reform. This move effectively put an end to the breadbasket strategy... (Awad, M. 1983: 13).

Instead of developing Sudan's food resource potentials to achieve Sudan's food self-sufficiency and regional food security for the Arab world, what we see in place is an empty basket. Neither has Sudan been able to produce enough food to feed its population, nor the Arab investors been able to recoup their financial investments. The substantial investment funds which were earmarked for the ambitious "breadbasket"

benefited the third partner: the Western technologists. Whether for the corruption and mismanagement of an incompetent Sudanese polity, unfavourable international conditions, self-interested international powers, or the empty unfulfilled promises from the Arab partners, the fact remains that the failure of the breadbasket strategy provides an interesting case of study of the interplay between national and international forces who, in the insatiable quest for capital expansion brought untold hardships to the unprotected rural producers who continue to bear the exorbitant costs of a development package that only brought to them insecurity, vulnerability, poverty and famine.

The Breadbasket Strategy involved massive capital investment which can only come through external capital finance resources. This has in the end led to a huge accumulation of debt on Sudan now roughly estimated at about US\$ 13 billion. It is all too obvious that the poor rural producers now bear the overwhelming burden in the repayment of these debts. Ironically, the rural poor are now eternally fettered to a debt that has been incurred ostensibly to develop their resources, but in practice only to exploit their resources to develop the modern sectors and to benefit the already rich and powerful social groups. It is no gainsaying that government officials have grabbed their handsome share, ministers, international agencies and consultancy firms, foreign experts, Western industrialists and companies producing technology; all have grabbed their share leaving Sudan rural poor to pay the debt. The breadbasket strategy can be seen as a concrete form of expression of the marriage between domestic and international interests.

4- 2- 5- i- Critique of the Breadbasket Strategy:

The principles of the breadbasket strategy have been formulated and laid out in three investment acts; the Five Year Plan (FYP) 1977/8-1982/3, the Food Investment Strategy (FIS) and the Basic Programme (BP). The general emphasis of the strategy has been the promotion and development of the modern agricultural sub-sectors, with the irrigated sub-sector receiving most of the financial allocations, and especially for export crops, e.g. cotton and groundnuts. The FIS and BP emphasised huge agricultural expansion- to be funded mainly from Arab finance capital- in mechanised grain production, livestock ranching and agro- industrial projects. As for the traditional subsistence subsector, the strategy has neither considered it seriously for development nor left it wholly untouched. Instead, the traditional sub-sector has been accorded a subsidiary subordinate role to the modern sector, to be penetrated, transformed, and exploited to generate the necessary foreign resources that are needed to invest in the planned expansion of the modern sectors. Thus, fulfilling its subsidiary subordinate role as a vast domain of raw resource whereby to be exploited to generate reserves to subsidise the

modern sectors, and as a vast reservoir of labour power to be drawn into the modern enclaves.

The neglect and exploitation of producers in the traditional sector, which supports about 80% of the population reflects the marginalisation of the vast majority of the rural populations. This is most manifestly evident in the ratio of allocation of development funds earmarked for this sector over the strategy period. Out of the S£ 425 million committed to agricultural development, only between 12-20% went to the traditional agriculture. The balance- between 80-88% have been channelled to the modern sectors; mainly to the irrigated schemes producing cash crops like cotton, groundnuts and other exportable crops. Even the small share that have been allocated to the traditional sector has in fact been meant for modern schemes such as modern ranching projects in the savannah region, mechanisation of rain agriculture, production of foodstuffs, etc. (Oesterdiekhoff and Wohlmuth 1983). Such modern enclaves within the traditional subsistence economy can only benefit big local merchants or absentee farmers resident in towns; with the consequences of creating the incipient process of local social differentiation within the traditional close-knit rural communities.

A fundamental pillar of the breadbasket strategy is that it was premised on a modernisation tradition based on horizontal agricultural expansion, rather than on vertical expansion and intensification of production. The horizontal expansionist model has been underpinned by the assumption that vast reservoir of unutilised lands and labour abound in the country that await to be tapped for "quick and economical increase in production". This expansionist drive envisaged an increase in acreage of 5.8 million feddans to be carried out by private capitalist farmers. These farmers will be supported from public funds channelled through the Mechanised Farming Corporation in order to expand production along the Blue Nile, Southern *Kordofan*, Southern *DarFur* and in parts of *Bahr El-Ghazal* (Six Year Plan, Vol. 2: p: 11). The policy amounted to almost a formal expropriation of land from its original claimants of traditional tillers. The consequences of this expropriation have been too ominous and far-reaching. It has posed immediate serious threats to the very livelihoods of the rural populations as these areas represented the most fertile productive lands in the localities, providing the rural populations with the more assured and reliable sources of their food supply in an inherently risky environment. The alienation of this more reassuring resource (of the most productive lands) placed the rural populations in a state of vulnerability and food insecurity. They have thus been left in a precarious condition permanently to the tyrannies of both a whimsical climate and merchant greed. Most sinister still is the spectre posed by this appropriation of a deepening and escalating ecological crisis. Such an expansion of mechanisation entailed grave environmental hazards to the delicate ecological balances in the fragile lands of the savannah. Moreover, the displacement of

the rural populations from the more productive lands meant that they responded to the pressure by shifting their farming and herding activities to more marginal lands. The shortfall in crop yield will have to be compensated for by increasing the cropped area in a variety of ways: by expanding into already cultivated areas; reducing fallow period; clearing new land; and by increasing stocking rates. The negative consequences of these strategies have been: destruction of the plant cover and processes of desertification; soil exhaustion and erosion; increased vulnerability to climatic stress; and - intense competition between farmers and herders.

The forceful promotion of modern capitalist farming enclaves to penetrate the rural peasant economies has triggered a chain reaction process. This process has involved the displacement of the local populations from their most fertile lands thus making them more vulnerable and exposed to unpredictable fluctuations of both climate and the market conditions; driving them to cultivate more fragile marginal lands, thus leading to more environmental degradation and a progressive depletion of the natural resource base of their economy, and thereby dangerously eroding the long-term viability of the ecosystem as a whole. The end result is that the rural populations are placed in a state of permanent vulnerability, poverty and insecurity to the vicissitudes of a precarious environment. Moreover, the state of local stability and the general law and order is seriously undermined by the incessant conflicts and struggles arising from the competition over land between local farmers and herders on the one hand, and between these and the new capitalist farm owners, on the other. These conflicts have indeed erupted into bloody inter-tribal wars. The inter-tribal wars that have been going on for some years now between the *Nuba* (of the *Nuba Mountains*) of Southern *Kordofan* and the *Baggara* groups, and between these latter and camel herders to the North, are examples in point. More dangerous still for pushing modern capitalist agriculture in the semi-arid savannah have been the grave ecological consequences. Planners have paid little attention to the likely consequences of such an expansion on upsetting the delicate ecological balances; and less so have been the farmers themselves. Planners' more immediate preoccupation has been to expand the base of marketable exportable crops as quickly and as economically as can be drawn from rural resources- irrespective of the ecological or social consequences. The general planning attitude could more accurately be described as one of "rural mining", implying a reckless quest for short-term maximisation of rural resource draining without due concern for the long-term damage such policies may have had on the long-term viability of the eco-system; nor taking the necessary precautionary measures to redeem the damage done. Such precautions could have been taken in terms of programmes of ecological regeneration and social welfare through mechanisms of redistribution of benefits accruing from the development projects. As for the capitalist farmers themselves, their investable inputs are composed

only of a tractor and some cash to hire rural labour, both of which could be secured, on subsidised credit, from public sources- provided one has the "right connections" in the state decision-making circles in the centre of power. These inputs are put to the maximum exploitation of the fragile savannah with grave ecological consequences. Although capitalist farmers are obligated by the regulations set by Mechanised Farming Corporation (MFC) for conservation of the land and proper farming practice, these regulations remain only on paper. For, in practice, neither do farmers abide by them, nor does the Corporation exercise any power to enforce their operation. Thus soils become exhausted and yields drop to levels that render the enterprise unprofitable. Consequently, farmers move on to new lands and continue the process. Short-term gain is the overriding force in what could be termed a "hit and run" opportunism. The end result of these reckless practices is land exhaustion, soil erosion, land barrenness which leads to the pervasive phenomenon of dust bowls, droughts and the inevitable ecological disaster. The recurrence of food insecurity in Sudan, which also led to famine can be explained largely in terms of these human-induced mal-practices which are associated with the drive towards the expansion of commercial production in marginal lands.

The expansion of commercial capitalist agriculture in the Sudanese context has created the classical conditions of regional polarisation and social differentiation as inevitable outcomes that are associated with the penetration of capitalist relations, and subordination of the rural economies. The process of subordination involves drawing the traditional subsistence economies to the modern poles of commercial capitalist production both in the forces of production (involving the exploitation of rural resources to service capitalist requirements), and in the relations of production (drawing labour from the countryside to meet the labour demands in capitalist enclaves). This relationship of subordination in the Sudanese context explains the co-existence of two mutually-reinforcing modes: modern and traditional; mutually-reinforcing in the sense that the development and expansion of the one is a necessary condition of the underdevelopment and retardation of the other. Here, the role of the state is crucial for the exercise of power to maintain the status-quo and the general structures of power, including the structures of economic power by means of which control the processes of asset transfer could be exercised as it is institutionally legitimised through the institutions of the state; e.g. the planning and finance ministries, the marketing and pricing systems. The various development acts and strategies, including those of the breadbasket, could be regarded as concrete forms of state legislatures which institutionally legitimises the subordination and exploitation of the rural economies (and the populations thereof) to the power of the state and the urban elites, and hence of the activities and practices involved in the processes of surplus appropriation and asset

transfer from the poor to the rich. The various acts of the development strategies, to all practical purposes, function as codes and rules which codify the relationship that is to hold between the different sectors of the economy and between different sections of the society in the different roles assigned to each sector or social groups. Such that, in the final analysis, these codes, as enacted in the various development acts benefit the urban-based commercial capitalist class and the agrarian bourgeoisie while simultaneously impoverishing the traditional rural producers by draining their resources to support the modern enterprises. We can understand rural poverty and associated problems of food insecurity, hunger and starvation among the traditional producers in Western Sudan as resulting from a systematic process of transfer of resources from the poor to the rich; a process that is institutionally functional as state legislatures embodied in the various Acts of the development strategies.

The role of the state has been crucial in maintaining this relationship of dominance and subordination between the two sectors and of the processes of regional polarisation and social differentiation implicit within it. The role of the state in this regard has been two-pronged: the maintenance of the structures of dominance internally as well as in mediating the subordination of these internal structures to the dominance of international capital. In this latter role, the state has functioned as an "agency" which mediates the dominance of international capital by re-organising and re-orienting the internal domestic structures of production and exchange along the lines of capitalism. This has necessarily required the creation of internal modern capitalist enclaves (or satellites) which are to develop and thrive on exploiting their orbital hinterlands.

The concrete forms through which these organisational structures have been expressed in development and economic strategies are complex and interlocking: the consideration of one issue entails considering other related issues. The inter-circular chains of causalities and relationships are too complex to exhaust in a limited scope. To try to understand them, we need to focus on certain salient events in the development of the Sudanese social and political history, and to try to decipher their international and regional power underpinnings and the bearings these have had on the configurations of internal power arrangements; and how all these bear on the fortunes and fates of the poor in the rural areas. Yet, such a macro-structural analysis can at the best provide only general indicators regarding secular trends which can be found elsewhere in the third world. They provide the context in which to trace the long-term processes responsible for the vulnerability and insecurity of large sections of the rural populations to famine.

The problems of hunger and starvation unto death therefore can be seen as the final results of a long chain of causalities extending from the international power structures of dominance, to individual state actors within the international hegemonic structure, to regional political and financial power influences, international financial institutions, to

internal power structures within the Sudanese state and the skewed exercise of state power geared to set in motion a systemic process of asset transfer from the poor to the rich and a resultant widening polarisation and social differentiation. Thus a widening internal divide has been created between rich social groups ever seeking to maximise their stakes at the expense of poor groups by virtue of their control over state power. The control over state power became the crux and arena of struggle. The poverty of the subordinated groups is both a condition of the others' affluence and a cause and consequence of marginalisation and exclusion from participation in state power. Here, the latter groups' poverty and the accompanying lack thereof of basic amenities; their food insecurity, their vulnerability to hunger and starvation are therefore essentially problems of a political nature, not environmental or simply economical, that are inextricably associated with their lack of power, political, economic and organisational. The lack of power of the rural poor, admittedly, is a direct consequence of the purposive exercise of power by the dominant groups to marginalise and exclude these elements from participation in state power, a conscious exercise that is necessary to maintain the status-quo and the general structures of dominance and hegemonic control. Conversely, it is true that their lack of power is also a cause for the state's neglect and marginalisation since these masses of the rural poor possess of no leverage that they can exert to force the government to accede to their demands. It is not surprising, therefore, to see that while famine and starvation were raging in *Kordofan* in 1984, the Governor of *Kordofan* region, strongly denied any existence of hunger in the region. Indeed, adding insult to injury, he entertained an audience to an expensive luncheon in the luxury Halls of the Grand Hotel in *Khartoum* to declare before his audience the Region to be free from hunger (Bush 1986). No doubt the Governor would have thought twice before he could have made such bold and utterly false statements had he been wary of a strong backlash from a powerful organised peasantry and a possible loss to his office. This being lacking, and well assured of his office and the full backing of a dictatorial military regime, and possibly also aware of the backing of even a mightier international power (the US), the Governor was in no qualms to dismiss the existence of famine altogether. Such an attitude from the part of a politician reflects not just an exterior face-value personal disposition, but is indeed reflective of a deeper malaise in the consciousness and frame of mind of the Sudanese ruling classes of central Sudan. The urban-based ruling classes of Central Sudan are conscious of their identity and belonging to a "core" hegemonic elite who consider themselves the guardians of the society. They are conscious that rule and the exercise of power are their exclusive privileges which they needed to defend by excluding other social, ethnic and cultural groups in the West, South and East who are the "perceived" subjects. In this frame of mind, overlaid no doubt with racism, originates the subtle ways in the exercise of state

power; most notably in the systematic exclusion from participation of these subordinate groups, concurrently with the systematic recruitment for the key functionaries of the state, the executive and the military from among members of the riverine alliances of ethnic groups. These alliances have historically to be forged between different factions of the riverine ethnic groups which they recognise as a practical necessity to consolidate their control over state power, and in consequence over other ethnic and cultural groups (Hale 1988; Barnett 1988; Shepherd 1983, 1978). Shepherd describes the Sudanese socio-political structures of dominance:

In Sudan capitalist agriculture developed in the context of a class structure which clearly demarcates capitalist as part of an ethnically distinct ruling class, from peasants and workers. The country's senior civil servants, ministers, army officers and businessmen of substance are overwhelmingly recruited from families with origins in the Northern region and particularly from amongst the Nubians... These groups have privileged access to and control over the modern state, and consequently over modern means of production both in the public and private sector. ... This position has given them advantage ... in access to productive capital and land, an advantage which has been extensively used (Shepherd 1983: 298).

In the context of these structures of dominance, we can understand how and why the Governors of *Kordofan* have traditionally been recruited from amongst the members of the Central riverine groups. These political appointments to higher offices reflect and reinforce the structures of dominance of the central groups and the subordination of *Kordofan's* people and resources to the interests of those groups. Similar have been the appointments of the Governors to the Southern regions and *DarFur* and the Eastern provinces. That is; the marginalised, subordinated peripheral regions. The dichotomy, differentiation and the related indicators manifested in differing living standards, levels of health and education, economic muscles and opportunity, between regions and social classes all draw an increasingly crystallising picture of class stratification in the Sudanese social setting and a status in the general relations of power no different from that of its colonial predecessor.

Although the role of the state in creating the conditions of poverty and famine in the rural areas is crucial, the state is by no means a completely autonomous entity that functions independently of the international system within which structures of dominance it operates. The international structures of dominance determine for weaker countries such as Sudan not only the volume and direction of financial capital inflows, investment and issues of trade, but interferes with the more concrete forms of determining who are to ascend to power and who are not. In the case of Sudan, Western power influences have been instrumental in foiling a communist-led coup against *Nimeiri* in July 1971, and thus helped him regain political control. The USA foreign policy towards the authoritarian military regime in Sudan consistently sought to bail *Nimeiri* out of troubled times by a flux of loans facilitated through the US control over

the IMF and World Bank voting rights (Gurdon 1991). The US in many ways helped *Nimeiri* outlive - over the 16-year period of his rule- no less than eleven coups, helped him through critical economic straits and political upheavals which otherwise would have brought his downfall long before the April uprising which finally overthrew him, but only after the US and its allies became convinced that it was no longer possible to patch up the regime any further. Conversely, the international powers have played an important role in undermining the parliamentary democratically elected government led by *Sadiq El-Mahdi* that came to power after the demise of the *Nimeiri* regime. This has come in the adverse consequences of withholding badly needed economic support to help the new government survive its first years, having to face the enormous and daunting realities of a collapsing economy that was sagging under the weight of a huge debt burden inherited from its predecessor. Unable to cope with the big accumulated difficulties and especially unable to tackle the economic problem without outside help, the parliamentary government collapsed, and a military junta took over power once again; this time with an extremist right-wing Muslim fundamentalist backing; ironically the elements that the US and its allies once actively supported to countervail left-wing forces in the country..

The perceptions of the urban-based elites who came to hold the reigns of power in the modern Sudanese state towards planning the development of pastoral and nomad communities in peripheral regions are prejudiced by notions that these communities are backward, and their traditional tribalistic structures and values are considered to be detrimental to progress and modernisation. As a result, policies of development have been adopted and designed to effect permanent transformation of rural communities so that they become more pliable to the direct control of the central state authority. However the urban elites soon became conscious of their own interests as the dominant privileged groups, a consciousness fanned by external influences which in due course articulated itself into the pursuit of economic gain and political power of the urban-based elites vis-a-vis the rural masses. Thus, they excluded the rural people from participation in decision-making on matters directly affecting their daily lives. It is important to stress that patterns of decision-making in and among territorial organisations of society play critical roles in development policy and in processes of social change and economic transformation. Who makes decisions, and how, affects the planning and execution of development programmes at any level of territorial organisation. Therefore, responsive planning and effective implementation of rural development programmes requires a high level of social initiative and participation of the rural masses through their local systems and political organisations and other forms of organised social or economic structures (Al-Arifi 1978). The ascendancy of the urban-based elites to central state power and the decision-making machinery biased

their perceptions against the rural populations which practically led to the effective political marginalisation of the latter and excluded them from participation in decision-making on matters affecting their own lives. Political marginalisation is understood to mean:

... a process by which certain categories within a political framework, be it classes, ethnic minorities, or occupational strata, are gradually excluded from the making of decisions about their own affairs, and see their scope of autonomous action increasingly circumscribed by externally imposed restrictions. It does not necessarily imply impoverishment, though a relative reduction of resources, both production and for subsistence, is an inevitable implication (Doornbus 1993: 116).

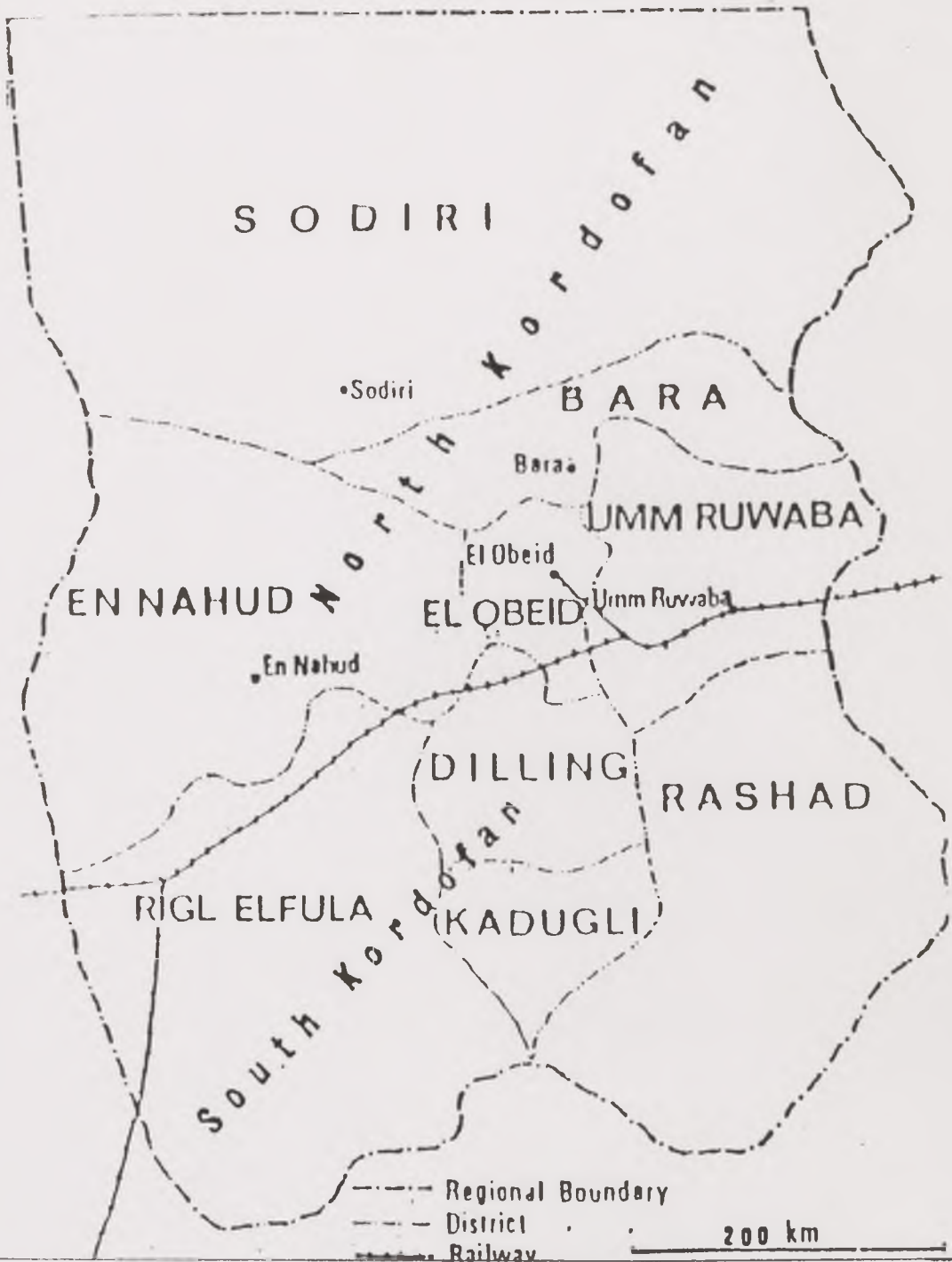
The interests of the rural populations can be very easily overlooked and are often completely neglected. These tendencies are generally encountered in the process of state-building and political integration in Sudan, and elsewhere.

Conclusion:

This chapter has sought to construe the social bases of political and economic power in the structure of the modern Sudanese State. It has shown that external interests of the British colonial power has laid down the foundations of modern capitalist enterprises in Sudan, which to a large extent determined the shape and direction of subsequent economic and social development planning in the country. Those who came to control state power in the post-independence era invariably have vested interests to continue the same development paradigm laid down by the colonial state. We have argued that the continuation and maintenance of colonial-type structures under national rule has been underpinned by external influences conditioned by the changing character of international development agenda at different periods. However, the amalgam of policies and interventions, ostensibly carried in the name of national unity and political homogeneity, must in truth be interpreted in quite a different mood, as steps taken to consolidate the political power and control of the central elites over the state, correspondingly with an increasing political marginalisation of the masses of rural populations, particularly the peasantry and pastoralists in peripheral regions, such as *Kordofan*. Even forms of representation under parliamentary democratic rule failed to articulate the local peoples aspirations and translate these into realities, nor their voices heard in *Khartoum*; since party politicians are locked up in endless manoeuvres with their rivals, and the relentless pursuit of day-to-day political survival than with the concerns of long-term rural development and the welfare of rural local communities. The local populations, e.g. in *Kordofan*, have been rendered extremely vulnerable to famine through a long process of underdevelopment, political marginalisation and economic exploitation over many long years, essentially through the agency of the state.

Indeed, this strikes to the very heart of the concept of the state, the state system, and its legitimacy in Sudan. The state, having failed its citizens unto famine and starvation, cannot be accepted as a legitimate, neutral, nationally inspired institution, but can be understood to be a product of practices of political organised exploitation of its subjects. As Abrams holds, the state is a "palpable nexus of practice and institutional structure centred in government and more or less extensive, unified and dominant in any society" (Abrams 1988: :82). And that the concept of the state entails a "message of domination-an ideological artefact attributing unity, morality and independence to the disunited, amoral and dependent workings of the practice of government" (Ibid: 81). This conception of the state as a mask entails an understanding of the importance of the state as an historically constituted and contested "exercise in legitimation in moral regulation" (Alonso 1994: 380). The next chapter traces the concrete forms of long-term underdevelopment, political marginalisation and economic exploitation of *Kordofan* in the context of the modern Sudanese state.

Map: : The Nine Administrative Districts of Kordofan



Source: Hubbard 1991; Reproduced from Sammani 1986:213.

Chapter 5

The Political Economy of Kordofan

Introduction:

Established famine theory emphasises direct causal correlations between famine and natural or man-made causes. This study offers a different way of explaining famine over time by stressing the importance of long-term processes in creating patterns of vulnerabilities among rural communities. This chapter argues that the persistence of famine among *Kordofan* rural communities can be attributed to long-term processes of underdevelopment, marginalisation and exploitation. These processes are traced in a historical perspective to reveal their political, social and economic underpinnings. The persistence of famine in *Kordofan* cannot be explained in simple natural terms, for *Kordofan* is a province rich in natural resource endowments. The region covers an area of about 10 million feddans, of which about 6 millions are exploited annually in agriculture and grazing. *Kordofan* cultivates the biggest area with millet in the whole Sudan. There are about 12 different varieties of millet grown in the region. The proportion of traditional agriculture generally in Sudan is three times that of the modern irrigated and mechanised agriculture; and *Kordofan* accounts for 50% of the total traditional farming in the country. The central zone of *Kordofan* is the largest area in the world for gum Arabic production with an estimated area of more than one million feddans grown with the *hashab* trees (*Acacia Senegal*). *Kordofan* produces over 60% of Sudan's total production of gum Arabic. Gum Arabic occupies fourth place in Sudan's exports, after having been second only to cotton for many years. And *El-Obeid* is the largest international centre for gum Arabic sales. The region is also the largest area cultivated with sesame in the country, and produces about 25% of Sudan's total production of sesame. Sesame occupies the third rank among Sudan's exports after cotton and groundnuts. There are about 22 different varieties of sesame grown in the region. The region consumes about 25% of its production of oilseeds, and the balance is exported outside, especially to Central Sudan. And the oil mills in *Khartoum* depend primarily on the region's produce of oilseeds. The region is the largest area cultivated with groundnuts in the country, and *Kordofan* produces about 35% of Sudan's total output of groundnuts. There are about 10 different varieties of groundnuts grown in the region. Groundnuts occupies the second place in Sudan's exports after cotton. The region is also a major producer of melon seeds and *kerkadie* (*hepiscus*). The water melons are 100% utilised; the kernel provides a rich source of water and food for both human and animal, the peel provides a rich source of animal feed, and the seeds are sold for cash and are used as an important source of food, especially during famines. The

water melons are estimated to yield about 8 million cubic metres of water annually, equivalent to the yield of 200 *hafirs* of a capacity of 40 thousand cubic metres each. *Kordofan* has a total population estimated at about 3 million people according to the 1983 census, representing 15% of Sudan's total population, making *Kordofan* the third most populous among Sudan's regions, after the Southern and Central regions. Population density in the Province is about 7.5 persons per square kilometre. *Kordofan* is the largest exporter of camels in the country. The region also supports the largest stocks of sheep in the country, and the *Hamari* lamb breed is the most desired and demanded for export. The total animal wealth in the region is estimated to number over 10 million heads. In addition, the region is home to some rare species of wild-life animals such as buffaloes, guzzle, reel, deer, reindeer, elephants, Selima Guzzle, ostriches, feasts, Giraffe, etc., estimated to number about 300 thousand heads (*Kordofan* Regional Ministry for Agriculture and Natural Resources, October 1982-3; Hassan Mohammad Nour 1991). *Kordofan* is very rich in natural resources. The persistence of famine in *Kordofan* cannot be explained in terms of shortage in the "availability" of resources. Famine in *Kordofan* can only be explained in political terms in the processes of marginalisation and exploitation embodied in policies pursued by the central state over a long period of time. Marginalisation and exploitation deepened and became particularly acute that famine emerges at a specific point in the history of relationship of *Kordofan* to the central Sudanese state. The emergence of famine underlies a deepening crisis in the Sudanese social and political system, both as a consequence and a reflection of a collapsing political system.

6- 1- The Political Bases of Development Policies:

The colonial state policies aimed to transform the local *Kordofan* economies and rural relations of production along the lines of market forces. In effect, it pursued policies of settlement of pastoral communities, imposed new taxation system, transformed local rural labour relations, developed transport and communication infrastructure, organised the markets and set the foundation for active trade and commercial activities. The rural *Kordofan* economies have been transformed with such rapidity and speed that has surpassed all anticipation. In a span of a few years, the local communities have witnessed their lives changed fundamentally from simple production to increasingly complex and volatile conditions of market exchanges. Colonial policies for *Kordofan* effectively destroyed the objective conditions which had for a long time reproduced the pastoral system, sustained livelihoods; and instituted in place the new market forces

The subsequent development and economic policies that have characterised the colonial period remained essentially unchanged after independence. With regard to

Kordofan, the basic tenets of the colonial policies remained as they were and even enhanced. These have been an even greater concentration on cash crop production, the subordination of *Kordofan* both as a reservoir of cheap labour to be attracted to the *Gezira* cotton schemes, and cheap labour for the production of cash crops, as well as a market for merchandise trade, especially in grains. National development policies remained colonial in essence, with even far more skewed adverse consequences on issues of regional imbalances, income disparities, economic exploitation; and political marginalisation (Doornbus 1993). These tendencies are generally encountered in the process of state-building and political integration in Sudan, and elsewhere. The amalgam of policies and interventions, ostensibly carried in the name of national unity and political homogeneity, must in truth be interpreted in quite a different mood, as steps taken to consolidate the political power and control of the central elites, correspondingly with an increasing political marginalisation of the masses of rural populations, particularly the peasantry and pastoralists in peripheral regions. The inevitable consequences of such long-term trends and tendencies in the perceptions of the central polity which lends the formulation of national policies, have been the creation of a widening gap between regions and a steady polarisation between social groups, sowing the seeds of discontent, conflict, famines and national disintegration.

The policy of "devolution to the colonies" adopted by the Colonial Office made it incumbent on the colonial governments to be financially independent from the centre. The colonial government in Sudan embarked on its development programme that would in due time enable her to become self-sufficient; and consequently sought the rapid transformation of the rural economies to bring these out for the set goals. The opening years of the Condominium era in *Kordofan* witnessed the policy of "pacification" of *Kordofan's* turbulent tribes in a bid to bring them under the control of the central state, and to blunt their *Mahdist* fervour. After the process of pacification had been completed, the government turned to establish peace, stability and social order as necessary prerequisites for the orderly operation of trade and the market. Laws were issued, which included the prohibition of slavery, suppression of tribal warfare, and the imposition of taxes. The colonial state in Sudan rapidly instituted the foundations of a market economy and effected a speedy transformation of *Kordofan* rural economies and incorporated these into the wider national and international market system. However, the change in the political scene in the power of the central state at independence favoured certain political forces from the centre of Sudan who came to assume political power of the central state. The new social forces were to prove no better than the departing colonial masters. The peoples of *Kordofan* were to find themselves systematically marginalised and excluded from participation in decision-making, and were more exploited economically.

The underlying causes of political marginalisation and economic exploitation of *Kordofan* communities can be sought in the political structure of the Sudanese state and the social forces which have come to dominate the political scene and the economic domain. This central power is an agglomeration of different and diverse social and political interest groups, but which nonetheless is ultimately united by a common denomination as the main hegemonic cultural core whose socio-economic and political stakes can only be realised through its unity as a core privileged urban elite vis-à-vis the rural masses (see previous chapter). When these forces assumed political power at independence, they invariably continued the same economic development paradigm that had been laid down by the colonial administration; namely that of continued support for the core enclaves of economic and social development in the Centre of Sudan, in the *Gezira*, and along the Banks of the Nile; to which core the diverse rural economies in the peripheral regions are subordinated to provide cheap labour and cheap resources. Indeed, in a national planning document, the official view was to assign to *Kordofan* the role of supplying cheap labour to the *Gezira* Scheme and the other cotton plantations along the Nile (Mamoun Behariri 1957). This pattern of unequal development continued until the contemporary period; the consequences of which have been a widening regional gap between the developed centre and the underdeveloped peripheries, deepening social and economic inequalities in the distribution of wealth and political power, and widening social polarisation between different groups. Famine and the on-going civil war are logical consequences.

5- 2- Restructuring *Kordofan* Labour Force:

In setting up the planning and development programmes for the Sudan, different regions of the country have been assigned different roles in the process of socio-economic transformation. Thus, the process of transformation of the different economies have proceeded in different tempos, with different goals, and with highly polarised results. On the one hand, there are cotton growing areas by the Blue Nile and White Nile where the daily rise and fall of world cotton prices are followed and discussed by interested tenants and proprietors; on the other hand, there are villagers whose occasional sale of some grain or an animal to pay their taxes is almost their only contact with money throughout the year (Barbour 1961: 263, see previous chapter).

In this context of development, *Kordofan* has been assigned the role of providing cheap labour power to the cotton schemes in the *Gezira* and the Nile; as well as producing cheap agricultural commodities for the market, and for revenue generation to the central state. As for the strategic goal of supplying the required labour force to the cotton schemes, the Sudanese state adopted policies designed to induce the rural populations of *Kordofan* to migrate to the main production areas in central Sudan,

especially to the *Gezira* Cotton Schemes, and to *Gedarif* area to hire their labour power in cotton picking or in the activities of commercial agricultural farming in the *Gedarif* commercial farms. Indeed, it has been official policy since the early days of the *Gezira Scheme* that seasonal labour requirements for cotton picking in the Scheme should come from Western Sudan, following the socio-economic restructuring of the Sudanese economy which assigned to the Western provinces (*Kordofan* and *DarFur*) the role of supplying cheap labour, both for the immediate term and as potential labour reserves required for the future developments of modern capitalist agricultural enterprises in central Sudan. This role of the Western provinces as the major source of cheap labour supply, has in fact been motivated by political as well as economic considerations. Politically, it has been aimed at containing the militant *Mahdist* sentiment in Western Sudan and to appease their symbolic leaderships in central Sudan. Thus followed the economic considerations which aimed to transform this militant force into an economically productive one producing for the market. The traditional leaderships have been co-opted into the new socio-economic structures of the colonial state, and thus played an instrumental role in mediating the transformation of these forces from religious militancy into commodity labour producing for the world capitalist market (Abbakar 1987). As such both the state and the symbolic traditional leaderships stood in alliance to benefit from such a transformation. However, while the state has reorganised *Kordofan* and the Western Sudan as the main potential reservoir of cheap labour, the general system which operates along these policy lines reproduces an ideology whereby such migrants are marginalised and denied full citizenship rights (Ibid) Accordingly, it has been envisaged that little organisational effort, or high incentives are necessary to attract this labour, since, it has been assumed, population pressure and surplus labour are sufficient to act as spontaneous push factors to drive rural populations from their villages and draw that labour to the schemes. And no doubt, the underdevelopment of *Kordofan*, its deprivation of government allocations, and the impoverisation of the populations of the region, can be understood in this context to have been tacitly employed as insidious push mechanisms to drive labour from *Kordofan* countryside to the plantations schemes in central Sudan. Consequently, in these areas of mechanised and commercial schemes, the agricultural seasonal labourers from *Kordofan* rural countryside, live in labour camps on the schemes under squalid conditions. The wages they receive for their labour are very low and sufficient only barely to support the migrants. With some shrift. they can make a little cash with which to return to the villages. Often, this cash is so little, that some return penniless if they attempt buying some clothes. Indeed, the IBRD, in a 1973 Report, calculated that total wage bill for hand-picking of cotton to be piasters 122 per 12 *feddans* at a yield of 6 *kantars* per *feddan* (a *kantar* = app. 100 lbs). This makes the wage offered to the labourer for

picking one *kantar* of cotton to be about Ps 0.588 (ILO Report 1978: 18). No wonder, then that the IBRD appraisal report pointed out that low wages are the main cause of the seasonal labour shortage for cotton picking in the *Gezira*; and concluded that: "[i]n fact, in central Sudan, it is becoming increasingly difficult to recruit farm workers owing to wage rates" (Ibid). Wage labour on the schemes is kept so low that it cannot reproduce this form of labour. Therefore, the cost of reproduction of this labour has to be born by the worker and his family in the villages of *Kordofan* who have to produce both for themselves (by growing food) and for the market (by growing cash crops) to meet their social needs; including the needs of their migrant members to the cotton plantations who in the most part return to the villages with very little from their wages.

The other official policy role designated to *Kordofan* is to produce cheap agricultural commodities for the market. This required radical transformation and restructuring of *Kordofan* rural economies.

5- 3- Policies of Livestock Production:

The early years of the Condominium witnessed rapid increases in animal numbers. This has been partly deliberately encouraged by the authorities with a view of restoring former conditions of rural animal wealth after the decimation of animals during the *Mahdia*. Measures were taken towards restoring animal wealth. As a result, the outbreaks of epidemic diseases, the feuds and inter-tribal warfare which acted as brakes to the growth of animals in the past were largely eliminated. These factors constrained the growth of animals in the past, and confined them only to certain areas. Consequently the effects on the environment from animal increases was limited. The Condominium authorities took certain administrative and regulatory measures which blunted the effectiveness of these factors. As a result, animal numbers grew rapidly, and the authorities again resorted to measures which aimed at minimising the effects of rapid animal increases on the environment through reducing animal numbers by the following measures: The policy of non-action; or "let perish" from epidemic diseases (Government of Sudan; The Report on Veterinary Services 1973); the use of propaganda among pastoral communities to encourage them increase off-take (Ibid). This step was met with little success essentially because herd owners asked the question where would they invest. Exports to Egypt of camels and cattle were encouraged. A beef canning factory was established at *Kosti* in 1952 designed with a meat-processing capacity of about 100 thousand heads of cattle a year. However, the project was unsuccessful, and was finally closed up. National Sudanese governments launched a massive programme to dig boreholes, wells and hafirs to make water available. Besides, they also increased the campaigns against epidemic diseases. These measures contributed to the rapid growth of animals in the sixties and seventies. More measures

were taken to encourage animal off-take: A fence was set up in the early 1960s at *Al-Rahad* along the railway line aimed to encourage livestock exporters to expand their export operations, and cheap concessionary rail fares are offered to exporters as further incentives to boost the livestock trade (for a list of livestock exporters, see Appendix F). A trekking route was opened in the mid-1970s to facilitate the transport of animals from areas of production in Western Sudan to areas of consumption in Central Sudan, and beyond. A butchery house and *Mahjar* were established at *El-Kadaru* aimed to encourage exports. The Livestock and Meat Marketing Corporation (LMMC)- a governmental parastatal - was established in the late 1970s to take over control and organisation of the livestock trade and marketing both for the domestic and export markets. However, all of these measures have had limited effect on stemming animal increases. This can be attributed to the following factors: (1) Animals are the only means of investment in the local economy. (2) The herd owners consider liquid money undesirable and risky, since there are no channels for storing it or investing it in the local economy, and therefore is apt to be squandered in unnecessary consumption. It has to be recognised that the pastoral society is a conservative one. (3) The lack of alternative avenues of reliable investment in the local economy outside animal stocking. (4) Livestock raising ensures the viability, unity and reproduction of the pastoral household unit, and the continuity of the larger tribal unit. (5) Animals provide social security against risk and uncertainties by keeping large and diversified herds of stocks. (6) Animals meet basic social functions, as dowry for marriage and other social demands. (7) Animals are also a symbol of social status and accord their owner distinguished social standing in the community. For these reasons pastoralism remains alive and viable in the local economy. However, this view of the pastoralists is not shared by the government who embarked on transforming the pastoral way of life in *Kordofan* towards agricultural production.

5- 4- Institutionalising Market Forces:

5- 4- 1- The beginnings of trade:

Kordofan , like the rest of Sudan was linked to the British economy through the colonial policies. British firms established branches at *Khartoum*, *Omdurman* and *El-Obeid*. These firms exercised monopolistic control over *Kordofan* produce as well as the import trade. Almost all items of mercantile trade were imported from Britain and other parts of the British Empire, from machine mills, to alcohol. These firms operated through their agents and representatives in *Khartoum* and *El-Obeid*.

Foreigners were the first to lead the business trade in *Kordofan*, notably Greeks, Syrians, Indians, Lebanese who are mostly Christians working mainly for British firms or in partnerships with them. These represented the pioneers leading the market process

towards a wider integration of *Kordofan* into the national and international market economy. They were favoured with trade and business licences and land to set up their premises, therefore almost all the properties in the market place were owned by foreigners who then leased the shops to national Sudanese mostly the *Jellaba* traders from North Central Sudan. Trade was rapidly and swiftly expanding, forcefully encouraged by the state. A thorough description of the condition of trade was given in an intelligence report in the early years of the re-occupation:

Immediately after the re-occupation of the region native and Lavantine merchants flocked west and revived the trade in gum, ivory and ostrich feathers. The trade routes with *Omdurman*, overland from *El-Obeid* and by river from Dueim, and between *En-Nuhud* and *El-Fasher (DarFur)*, were re-opened, and the commercial centres of *En-Nuhud*, *El-Obeid* and Dueim quickly recovered a measure of their former prosperity. Improved facilities of transport and communications demanded the establishment of local markets which were visited by itinerant traders (*Jellaba*), and some of which (e.g. Um Ruaba) are developing into important centres. Fresh areas of country were exploited, new articles of profitable trade were discovered, and the export of cereals, sesame, earth-nuts, and cattle developed rapidly. The present situation affords striking testimony of the capacity of the native population to recover from the stagnation of the Dervish period and to adapt themselves to the new and improved conditions of trade. The total number of foreign traders- Syrian, Greek, Armenian and Egyptian- now operating in the region falls little short of 400, and native merchants- Danagla, Jaaliin, and others- penetrate everywhere. A branch of the National Bank of Egypt is being opened at *El-Obeid*, and through rates are quoted for consignments by railway to *Khartoum* and Port Sudan (Gov. of Sudan Int. Report 1912: 127- 8).

During this period, *El-Obeid* revived its former glory as an important trade centre in Western Sudan. Trade expanded rapidly and markets were established and organised. There were three major markets established at *El-Obeid* at the time; a market for livestock, another for agricultural produce, and a third market called "*Suq el-Jellaba*" for petty trade operations. British and Egyptian banks also opened branches in *El-Obeid*. The banks played an important role in the expansion of trade in *Kordofan*. They extended financial and other facilities (e.g. storage) for their clients and companies to conduct big trade and business operations both in the export and import trade. The sale of *Kordofan* produce constituted the most important line of the export trade, which necessarily required adequate storage facilities which the banks readily provided in their stores. For example, a bank would extend financial and credit facilities to one of its clients of about 10 thousand pounds for sales of produce, and would then provide storage for the quantities bought, and also helps in transport. During this period, almost all of the market operations were controlled by foreigners, and after independence Sudanese nationals took over.

The Sudanese engaged in the trade since the early days of the Condominium as petty traders working for big merchants and firms stationed in *Khartoum*, *Omdurman* and *El-Obeid*. These were *Jellaba* "itinerant" traders who carried their merchandise stock on their backs, on donkeys and comeback. They roamed the countryside in *Kordofan* and

elsewhere with their trade. They sold to the local village populations their petty trade which was composed of items such as soaps, perfumes, spices, cloth, dates, cambric, dies, etc., and bought from the villages gum Arabic, sesame, and hides. These *Jellaba* or itinerant traders played an instrumental role in opening up the rural markets to foreign goods. Indeed, the colonial authorities actively encouraged and supported their activities. And in a famous statement, one of the colonial administrators advised that these traders be encouraged and supported because they can reach the remotest communities and penetrate deep into the countryside to open up rural markets to foreign goods.

This method of itinerant trading continued until about independence, when the Sudanese took over the more important lines of trade, and assumed the role which was the prerogative of their colonial predecessors as patrons of the market and the business trade. Consequently, they came to inherit the benefits accruing from the control of the lucrative trade over *Kordofan* produce. This new class of merchants were preponderantly *Jellaba* from Northern Sudan, mostly from the *Bidairiyya* section of the *Shayigiyya*, and *Jaaliyyin*. However, they were in time rivalled and even excelled by an upsurge of a new wave of enterprising merchants from Central Sudan, coming from the *Gezira*, no doubt prospered by the quick wealth the cotton industry brought them. The *Halfawiyyin* and *Denagla* groups did not enter trade at that time, and were mostly employed in the houses of the British and Egyptian colonial overlords as cooks and servants. The indigenous *Kordofanis* were still Bedouins pursuing a nomadic life-style, disdained petty trading and looked down on petty traders and towns-life generally, thus kept aloof and independent from the arenas of the market and politics. It is only recently, in the last ten to fifteen years that the indigenous *Kordofani* people started to enter into the market and take active part in the regional trade (personal communication). This new mood indeed marks a crucial shift in the traditional socio-economic structures signalling an important phase in the continuum of local adaptations in rural *Kordofan* to the changing socio-economic and political environment. In general terms, trade in *Kordofan* has come to be characterised by three facets: the export trade (mainly concentrates on *Kordofan* agricultural produce), an import trade (of manufactured finished goods), and the institution of a regional grain trade; mainly in *dura* imported to *Kordofan* from Central Sudan and the *Gedarif* area.

5- 4- 2- The import trade into Kordofan:

The import trade into *Kordofan* consisted of a plethora of mercantile trade items coming from diverse international sources. Trade items ranged from British-made machine mills, to German-made automatic machines, to British-made Mineral Water Machines, to textiles of British, Japanese, Egyptian and Bengali origin, to shoes, soaps,

etc. By the 1940s, the list had become a plethora too vast to circumscribe. By the 1950s, following the expansion of the sterling trade zone, and concomitant arrangements for the transferability of the New Americas, (the USA and its dependencies), trade licences in Sudan were "given for the import of goods from the Scheduled Territories and from the countries comprising the Transferable Account Area" (Ministry of Economics and Commerce 1955). Inside *Kordofan*, trade licences were given to applicants in all sorts of trade, for export, import, wholesale, and retail trade. Petty trade was also encouraged, and licences were given on half fees for services, street vendor shops, butchers, vegetable retailers, bread sellers, hairdressers' shops, cafes, tailor shops. In all, the clear purpose was the rapid promotion of an active vibrant market economy for the benefit of trade. Interestingly, in 1950 a man applied for a licence to set up a printing press. The DC at *El-Obeid* wrote back to inform the applicant that "the Civil Secretary has approved in principle your application for licence under ... of the Press Ordinance 1930 for a printing press in *El-Obeid* subject to the condition that the printing press is used solely for commercial purposes"; and that "[i]t was noted that you are not intending to print a newspaper or magazine" (District Commissioner, *El-Obeid*, April 1950). However, the government has a monopoly over the major part of the import trade to ensure a good revenue coming to the treasury. One such important government monopoly is the import, distribution and sale of sugar. The following table illustrates the increase in imports of major consumer goods:

Table 2 Imports of sugar, tea, coffee, and cotton fabrics in five-year-period averages 1904 - 1946 as % of 1907 (1907 = 100):

Period	Sugar	Tea	Coffee	Cotton Fabr
1907	100	100	100	100
1907 - 11	144	284	161	124
1912 - 16	203	420	293	142
1917 - 21	177	622	520	129
1922 - 26	208	922	624	170
1927 - 31	382	1690	690	219
1932 - 36	287	1630	1065	269
1937 - 41	495	2219	1250	902
1942 - 46	358	1466	1443	235

Source: Sudan Government, 1947: 57-8 (cited in Ahmed 1987).

Sugar was imported mainly from Egypt; and by 1953, "[t]wo big stores have recently been constructed in *El-Obeid* at the Central Government expenses, and will be operated by the Central Government too, viz. Customs will supply the store-keeper and *Ghaffir* and bear all expenses and the *Mudiria* will undertake the distribution of sugar and collection of the cost" (Governor, *Kordofan*, Nov. 1955, NRO; Vol. 2.K.1. Obeid 21/1/15). By 1956, the Customs authorities wrote to the Governor of *Kordofan* reminding him that they " have at *El-Obeid* store about 828 tons of raw sugar which

have been remaining there for several months unsold". The Customs authorities asked the Governor "if something could be done to encourage its sale"; and suggested that "some sort of propaganda amongst the people will bring a good result" (Director of Customs, Sept. 1956, NRO; Vol. 2.K.1. Obeid 21/1/1). Imported goods included all kinds of cloth and fabrics, sugar, all kinds of European provisions, shoes, silver bars (for ornament), tobacco, tea, soaps, cosmetics, tools, and scales and measures.

5- 4- 3- The organisation of markets and the export trade from Kordofan:

The opening years of the Condominium witnessed the organisation of markets for the benefit of trade. In the regional centres of *Kordofan*, i.e. in *El-Obeid*, *En-Nuhud*, *Um Rwaba*, markets were set up and organised as a necessary prerequisite for the opening up of the rural *Kordofan* economies to trade and their incorporation into the wider national and international markets. The regional market centres were to function as collection and distribution points to regulate both the import and export trade.

The organised produce markets, administered by government officials, were set up since 1936, and aimed to "ensure that cultivators and gum tappers obtain a fair price and were not done down by having to sell in private to small traders" (Robertson 1974: 54). Throughout the colonial period, the government worked diligently to control prices through market regulations and the institution of detailed bookkeeping of produce sales and prices. One colonial official explained the aim behind this policy of control: "to establish the principle that trade, like any other profession, should be conducted for the good of the community as well as for the profit of the trade" (Henderson 1946: 24).

In this spirit, the Local Government Ordinance on the "Regulations of Local Produce Markets" in 1929, set out the laws regulating the sale of produce in the market place. These laws postulated that: sellers, usually village merchants, collect the produce from the village farmers and bring it to the regional produce market for sale. The grading of the produce is decided by an officially appointed clerk.. Buyers may inspect the produce. Then the auction of the produce takes place in the market sheds (which consist of numbered seats arranged in sequence for buyers and sellers). The *khabirs* (expert inspectors) assemble in the auction shed allotted to them. The produce is then auctioned in numerically arranged order of lots. The auctioning is conducted by an auctioneer who announces the lot and number of sacks therein. Bidding then begins, and bids shall be the price offered per kantar of produce. The first bid shall be a multiple of 10 mms (1 mm. = 0.01 S£). The *khabir* accepts or rejects the bid. His acceptance of a bid is binding to all sellers. All produce is weighted after sale, and sacked by the buyer. The clerk in charge of the weighting machine shall weigh the produce of each seller, and prepare a weight ticket showing details of:

the date.

the kind of produce,
the gross weight,
the name of the khabir,
the name of the buyer,
the district of origin of the produce, and
the price per kantar.

Sellers then proceed with their weight tickets to the accountant's office where the accountant calculates and records the amount due to each seller. Sellers present their weight tickets to the buyers for immediate payment of the amounts due. In theory, organised produce market regulations applied to all kinds of produce, including *dura*, and that no transactions of produce should be conducted outside the organised produce market; with gum Arabic receiving a special emphasis. However, (as we shall see) although food grains were theoretically under the same set of regulations, in practice, they were conducted outside the organised produce markets. The direction of the export trade of *Kordofan* produce was conducted by foreign firms working through their agents operating from *El-Obeid*. The trade is large, enterprising and very lucrative; and attracted big foreign firms and banks.

The process of trade was further facilitated by the relatively large amounts of trading credit provided by the big export firms to their local agents. Indeed, the opportunity to become a representative or agent of one of the big commercial enterprises provided the single most important source of trading credit which enabled traders to make enormous profits on amounts far exceeding their actual trading capital (Ahmed 1987).

Companies trading in *Kordofan* produce, were concerned with the establishment of a good name in outside markets for their agricultural exports. The African Trading Company, for example, wrote in 1956 to the authorities in *Kordofan* drawing their attention that:

... a most unsatisfactory procedure adopted by the cultivators and producers in *Kordofan* and other market stations over the produce they are bringing in from the fields for sale in various Zarebas, and especially to groundnuts in shell. It has been noticed that the foreign matters such as stones, mud, stalks, etc. is to be found in a considerable percentage in each bag ... the exporters of this country have sustained a severe loss by indemnifying buyers with such absurd and unjustified impurities. ... therefore, we would appreciate it if you will kindly draw the attention of the Commissioners in the various Districts of the Country ... (Sudan Chamber of Commerce, 1956. NRO, *Kordofan*; Vol.: 1 & 2; Ref. No. EXP/840).

The Company was trading in the export produce, and was concerned about the quality and cleanliness of the produce destined for export. Cleaning the produce became a requirement for the advantage of the export trade. As a result, cleaning of the major *Kordofan* crops was carried through a traditional method of sifting and was a monopoly of Messrs. Mitchell Cotts & Co. Ltd., a British firm whose contract with the Sudanese government continued until the close of 1957.

The Governor's response to the Company's worries concerning impurities, issued a letter to all DCs to the effect that:

It is very important to get good prices for our crops and that a good name in the international market should be established for it. If the good name is lost, then it means low prices for the cultivators. To prevent this ... Councils should take a great interest in produce and its cleaning and improved quality. Would you put this correspondence before your Council to explore ways and means of avoiding unclean produce coming into the markets. This can be done by various ways, viz.;

(a) Wide-scale propaganda at markets, court sittings, meetings etc. to encourage cultivators to clean their produce ...

(b) Allowing merchants to inspect produce ...

(c) Thinking out other ways and means of achieving the purpose

(Governor Of *Kordofan* 1956. NRO; *Kordofan* Vol. 2. K-1-Obeid 21/1/2).

5- 4- 4- The export trade of Kordofan agricultural produce:

A characteristic feature of the export trade of *Kordofan* produce is that it is exclusively controlled by economic elites from the centre of Sudan, merchants and businesses mostly based in *Khartoum* and *Omdurman*; to the total exclusion of *Kordofan* indigenous participants. These elements were privileged with export and import trade licences essentially as a result of their influence over the state decision-making machinery. By far, gum Arabic is the most significant of *Kordofan* produce, and is given special importance in terms of organisation and conduction of its trade. Market regulations were devised to monitor the gum trade.

5- 4- 4- i- The gum Arabic trade and exports:

In a "Legislature on Commission Agents in Produce Markets", on Traders' Licences and Taxation of Business Profits Regulations of 1929 Laws, *El-Obeid* District Commissioner wrote to the town clerk to see to enforce the laws applying to the produce markets, especially the gum auction market; instructing him that: (a) every person entering the gum auction market must have permission to do so; that (b) no such person should be permitted to enter the gum auction unless he has either a valid trader's licence in own name, a valid certificate for branch from H.Q. *merkaz* of firm employing him, or a valid certificate of agent without premises from H. Q. *merkaz* of firm employing him. And (c) If any person admitted to gum auction do not have the above; the local Council should write to the H.Q. *merkaz* of the firm employing him stating that H.Q. firm has failed to give all information required regarding agents when taking out their trader's Licence, that agent or branch is agreed by Council and approved by District Commissioner. H.Q. *merkaz* must write necessary particulars on H.Q. Traders Licence and issue necessary certificate to agent or branch concerned (District Commissioner; Central District, *El-Obeid*; Aug. 1949. NRO. Vol. 1&2: No. CD/25, A.1).

Gum became the chief export of the Sudan in the first half of the Condominium period until about the late 1920s of this century when it was superseded by cotton (Beshai 1976). Average market prices rose steadily; and in *Omdurman*, the principal gum market at the time, the price of high quality *hashab* or *Kordofan* gum increased from 122 piasters per 100 Kilos in 1904 to 234 piasters in 1910 (Ibid). The development of the transport and communication system, the *Khartoum-Sennar-Kosti* railway line reached *El-Obeid* by 1912, the *Port Sudan-Kassala-Gedarif* line connected the main area of gum production in *Kordofan* with the main Port, as also it linked the main food surplus areas in Central-Eastern Sudan with the main consumption area of *Kordofan*. The officially cheapened fares on rail transport greatly stimulated both the export of gum and other *Kordofan* produce and animals, as well as boosted imports into *Kordofan*, especially of *dura*, from other Sudan regions. *El-Obeid* Gum Market was established and organised in 1912. Strict regulations were observed to ensure good returns for the producers. Consequently, prices rose between four to five times their averages in 1903 (Daly 1986).

Table 3 Quantities of gum exported from Sudan in ten-year periods between 1900 - 1986 (in kantars)

Year	1900-09	1910-19	1920- 29	1930- 39	1940- 49	1950-59	1960- 69	1970- 79	1980- 86
Prodton	7841.5	14994.7	16272.4	17001.7	22580.3	38252.4	50586.1	33599.9	26580.5

Source: calculated from Ahmed 1987.

Table 4 Gum Arabic production 1960 - 1986; *Hashab* Gum (in 000 M. tons)

Year	Production	Year	Production
1961/61	42956	1973/74	23464
1961/62	45647	1974/75	46500
1962/63	42713	1975/76	43000
1963/64	43480	1976/77	32141
1964/65	44794	1977/78	23200
1965/66	47959	1978/79	26207
1966/67	42713	1979/80	20699
1967/68	58896	1980/81	24757
1968/69	42851	1981/82	31984
1969/70	35068	1982/83	22555
1970/71	38616	1983/84	34000
1971/72	31468	1984/85	11313
1972/73	25940	1985/86	18047

Source: Gum Arabic Company Records. *Khartoum*.

The remarkable increases in the volume and value in the gum trade from *Kordofan* brought its benefits for the Central Government revenue from the royalty imposed on gum. In 1901, this royalty on gum was assessed at 90 piastres per *kantar* of *hashab* gum. Although adjustments to this rate continued to be made upwards and downwards, the net returns for the Central Government's exchequer were substantial.

Table 5 Gum Arabic auction price at *En-Nuhud* and export price at Port Sudan 1971/2 - 1981/2.

Year	Auction price	Export price	Auction % of Expt.
1971/2	4.05	9.77	41
1972/3	4.15	10.20	41
1973/4	5.85	33.60	17
1874/5	1642	23.28	70
1975/6	8.10	22.43	36
1976/7	8.10	21.32	38
1977/8	8.10	21.90	37
1978/9	10.12	26.90	38
199/80	10.12	36.09	28
1980/1	14.40	50.45	28
1981/2	17.10	58.00	29

Source: Gum Arabic Company; *Khartoum*.

This earned the Sudan Central Government 20% of its total revenue, from royalties and export duties; and in 1902, gum accounted for no less than 75% of the country's total export earnings. Although cotton was soon to become the backbone of the Sudanese economy from the end of 1920s onwards, gum regularly accounted for between 20 - 30% of the total value of Sudan's exports, averaging 43% in 1912; 39.3% in 1923; and 34.8% in 1931 when the cotton crop failed (Beshai 1976; Ahmed 1987). In 1931, out of a total export volume of 20,086 tons, *Kordofan's* share came to 17,736 9; or 88% of the total; (Ahmed 1987). There is little evidence to suggest that, prior to the Condominium (1899), the ordinary *Hamar* had been a significant producer and exporter of gum Arabic. According to Mr. Willis, Inspector of Western *Kordofan* "the production of gum from *Dar Hamar* in the pre-Dervish (pre-*Mahdiyya*) days was negligible (Ibid).

Table 6 Government revenue from the Gum Arabic Company's sales

Year	Total Value of Sales (£S)	Government Revenue.	Govnmt. Rv.as % of Sales
1970	8968258	2347059	26
1971	8769118	2498797	28
1972	9743519	2950070	30
1973	8117830	2601646	32
1974	15382180	8308496	54
1975	8113948	3434771	42
1976	12916627	5935354	46
1977	16122022	4308850	26
1978	16053384	4608122	27
1979	25246649	9825192	39
1980	26431120	12138926	46
1981	39449000	20555286	52
1982	39903176	16299332	41
1983	80657665	33030211	41
1984	64466070	16144360	25
1985	39410958	12727910	32

Source: Gum Arabic Company Report 1986, *Khartoum*.

A critical question which remains to be asked: is why the state and the market functionaries who organise, control and benefit from the gum trade allowed the invaluable *Hashab* forests to become unproductive? Why has there been a conspicuous absence of efforts, in form of services, credit, research or conservation efforts to check the decline of the *Hashab* forests? The answer seems to be that *Hashab* forests are mined as a natural resource, together with the human labour involved in its production, and are treated by the state and the merchant class as a "mine" to be tapped. It is a mine, moreover, that seems to require neither inputs nor reinvestment aimed for long-term sustainable production. Once the "mine" is exhausted, it is abandoned; its exploiters reaped their profits; hit and run.

In the post-colonial era, the official policy that all gum transactions should take place in the auction produce market remained unchanged. However, in the 1970s, the government introduced even greater control measures on the gum trade by the establishment of the Gum Arabic Company (GAC). The Company espouses a responsibility to ensure that a minimum auction price is received by the producer, and that this minimum price is to be maintained, such that the company has to intervene as a buyer to maintain the declared minimum price from falling, and in case where excess quantities of produce is left unpurchased by traders. However, most of the gum produce; (of about 70%) is transacted outside the proper produce market, therefore, the actual price realised by the producer is less than the minimum auction price declared by the Company. On the other hand, the profits realised by the GAC, and the gum big businesses and exporters amounts to a huge margin of no less than 70% of the value of export (Oesterdiekhoff 1983). The GAC is a state parastatal which controls the gum trade, running the auctions markets, setting minimum prices, allowing even less to reach the farmer. Merchant cartels at the auctions ensure that prices remain low, while the government, despite its professed policy of "fairness" to the farmer, manages at various stages to extract no less than seven separate taxes or dividends out of the price, and to manipulate the foreign exchange rate used in gum transactions to its advantage (Cater 1986). Thus, the state receives a large share of the proceeds from the gum trade, as taxes on gum in addition to its dividends as a shareholder in the GAC profits. At a time when the returns for the actual producers dwindle, simultaneously the central Government's earnings from the Gum export trade continued to increase, steadily from 25% in 1970 to 52% in 1981, with an average annual increase of 37% (Ahmed 1987).

Although the GAC has made some efforts at least to maintain a semblance of "fairness" by trying to give the producer a "good" price in order to stimulate production, these efforts have been frustrated by the merchant class, and not least by the state itself. Favourable conditions in the international gum trade resulted in a temporary boom in 1974/5 and prices picked up. The GAC wanted to transfer a small part of this price rise

to the producers; and in effect raised the price to S£ 14.30 to the *Kantar*. The big merchants in their turn transmitted only 12% of this increase to the producer. The export price rose to S£ 23.40 to the *Kantar*. 63% of which was pocketed by the big merchants (Ahmed 1987).

5- 4- 4- ii- The export of sesame and other oilseeds:

Sesame constituted one of the major exports to outside markets. Licensed exporters can export the crop to any destination. In a letter concerning the export of sesame. the Director of the Ministry of Economics and Commerce, issued the following memorandum:

The open general licence for the export of sesame seed from the Sudan to any destination ... is hereby further extended

Exporters are reminded of the rail transport congestion which is usual later in the season when the cotton crop begins to move and are strongly advised in their own interests to move as much of their export grains as possible to Port Sudan during the next two months.

The export of sesame OIL is NOT permitted (Director, Ministry of Economics and Commerce; Oct. 1954. Press Notice No. 725: Export of Sesame).

During the colonial period, the concentration on oilseeds production was rather on sesame which was traditionally more important in the domestic market, groundnuts production was less important than sesame. But owing to the shortage of vegetable oils created by World War 2 caused a sudden shift in oilseeds production, and groundnuts witnessed dramatic increases in production stimulated by the newly created demand. As a result, on the eve of independence, the area of groundnuts under rainfed cultivation increased from 68,912 feddans in 1946 to 296,857 feddans by 1954/5 (Saad el Din Fawzi 1958; Ahmed 1987). Cash crop production has been encouraged generally, but especially oilseeds which witnessed enormous increases during the decade of the sixties and seventies, in the context of the policy of "diversification" of exports in the sixties, and under the "open door policy" in the seventies imposed upon the *Nimeiri* regime by its international lenders like the World Bank and the IMF, and the tying up of foreign aid to the production of exportable agricultural produce, i.e. oilseeds. Thus the area cultivated with groundnuts increased from about 140000 feddans in the mid-1950s to 935000 in 1965/6. The national development policies under *Nimeiri*, under international strictures, a demand for vegetable oils in the Middle Eastern Arab states, coupled with favourable international market prices for oilseeds, all combined to stimulate production in the 1970s, and the area committed to groundnuts increased dramatically, averaging 1556000 feddans in the mid-1970s period. Thus groundnuts swallowed most of the best lands previously cultivated with millet and other food crops. The area cultivated with groundnuts exceeded by a wide margin the total area cultivated with all other crops combined. Moreover, farmers devoted most of their labour time to the production of

groundnuts and other cash crops. It is also that competition between cash crops and food crops in critical farming operations for household labour demands, favoured cash crops and leaving food-crop farms virtually unattended for the most critical periods, thus critically exacerbating the households food situation. The most significant and long-lasting effect of the development of cash cropping is that it has permanently instituted a local agricultural wage labour market in which the merchants class stand to be the prime beneficiaries of this development, and the poorer households are disadvantaged. They can hire local labour to till their farms, especially from poorer households, who in effect lose almost all of their labour power to the benefit of those with a little cash, like the village merchants who can afford to pay the small wages.

National governments in the post-colonial era pursued policies of modernisation financed by public, private and foreign investment capital. During this period, we witness the proliferation of the state corporate enterprises in the shape of government parastatals which have greatly helped to consolidate the state's centralised political power to such a considerable extent, and gave it legal rights to control the production, marketing and pricing of key commodities and sectors in the economy, in effect were to determine the fortunes and indeed the fates of many agricultural producers.

The declared objectives of the state parastatals are ostensibly expressed to be aimed to work towards self-sufficiency in food production, rationalisation of the agricultural sector, and the implementation of the strategy of agro-based industrialisation. In order to achieve these objectives, It is envisaged that mercantilism and commercialisation of both the agricultural and the livestock sectors are to be encouraged and supported through efficient marketing and price control policies. A fundamental pillar of the policy is to increase exportable surpluses of cash crops. Although these were in principle the main objectives espoused by the state parastatals, it is interesting to note that the stated objective of food self-sufficiency and agro-based industrialisation hardly got off the ground, and remained only on paper. Instead, the state parastatals concentrated the whole of their operations on the secondary less important, though much more lucrative business of pricing and marketing the rural agricultural produce, much to the benefit of the shareholders, the state, and the managerial class of these corporations.. Through their control over the marketing and pricing policies of the key commodities, these interest groups, including the state as a beneficiary agent, were able to reap enormous profits, basically appropriations of rural surplus labour. These big interests in fact underpin the policies of the state for the wholesale transformation of the rural economies from subsistence to cash crop production.

In 1974, the government established the Oilseeds Company, a joint venture between the public and private sectors. Obviously, the Company is a joint enterprise whose role is to service the interests of both the central Government for revenue generation and also

to guard the interests of big exporters and businesses involved in the oilseeds trade. The Company has been granted monopoly rights for the purchase, disposal, transport, marketing, pricing and export of oilseeds. The Company's statutes declare a commitment to maintaining "fair" prices for producers. However, this is more easily said than done. The Company's actual practices and prices do not in fact adhere to the stated goals. The government is the biggest shareholder in the Oilseeds Company, its share standing to 58%, therefore, is practically the single most powerful agent in the monopoly of the trade, and the arch appropriator of the proceeds accruing from the trade. The government appropriates 65% of the OSC gross profits as business tax, 5% of the sales as development tax, and 58% of the Company's net profits as dividends on its shares (Ahmed 1987).

Oilseeds are taxed less heavily than gum Arabic. The official justification is cast in terms of the export nature of gum Arabic which is exclusively an export crop, while a large part of oilseeds production is consumed domestically. This is a justification which disguises the true fact behind the discrepancy in the official pricing policies; one essentially political in nature. The very extortionate taxing and taxes on gum can be more creditably explained by the fact that gum is produced mainly in Western Sudan, particularly in *Kordofan*, where there is little political leverage to bear on the state for more equitable prices. As for oilseeds, the major part of the crop is produced in areas of political pressure, in Central Sudan, the *Gezira* and the *Gedarif* areas where powerful interest groups influence the decision-making for lower taxes. One such important interest group is the lobby of oil-pressing mills who can be enabled to purchase their requirements of oilseeds at lower prices, and whatever benefits accruing from the stage of processing passes completely to the mill-owners. The finished processed oil product, together with the oil cake can indeed yield enormous profits. One oil-mill owner in *El-Obeid* commented that the sale value of the cake can recover the entire purchase costs of raw sesame, leaving the value of the finished processed oil as net profit. However, the massive increase in groundnuts production has had negative effects on the land. The harvesting of the crop causes loosening of the earth, making it susceptible to winds; and the extensive lands which become bare after harvesting, and the weeding results in a serious removal of grass cover vital to keep the soil intact. All of these processes involved in groundnuts production, ultimately contributed to erosion and deepening ecological disturbances of the local environment. Naturally, yields started to decline towards the end of the 1970s, which decline needed to be offset by further increases in the cultivable area. Things were made even worse by a correspondingly falling international prices for oilseeds as the world recession set in. As a result of these adversities, with declining yields and falling prices, the local producers suffered a serious blow to their incomes. More critically still, is that their dependence on cash

earnings from the sale of groundnuts and other cash crops for their food consumption needs is now severely undermined by a combination of internal and external conditions over which they have little control.

5- 4- 4- iii- Export of *Dura* and *Dukhn*:

Following the result of recommendation of the Board of Economics and Trade endorsed and agreed upon by the Council of Ministers, the Director of the Ministry of Economics and Commerce issued a press notice. The letter is addressed to the Governor of *Kordofan* in which the Central Government instructed the authorities in *Kordofan* to extend the export licences on *dura* and *dukhn*. The letter reads as follows:

That the open general licence for the export of *dura* and *dukhn* to any destination be extended to October 31st, 1955 and that as much publicity as possible be given through the Province Authorities and by press notice to the desirability of moving grain intended for export as soon as possible to Port Sudan since, as happened last season, the capacity of the railways will be severely taxed as soon as the cotton is ready for transport.

And in view of the transport congestion the export of *dura* is bound to create which coincides with the season of cotton transport, the letter went on to advise that:

...in accordance with the recommendations ... you will give the maximum publicity to the advice to move as much grain as possible to Port Sudan In particular, we hope that it will be impressed on the *Gedarif* exporters that the best way to prevent a recurrence of last season's anxieties is to move what they can now. ... there is no reason why old crop *dura* and new *fatarita* should not be moved early (Director; Ministry of Economics & Commerce. Oct. 1954. NRO; *Kordofan*, Vol. 1 & 2: No. MEC/SP/62-1-9).

The response of *Kordofan* Council to the central government's policy on the continuation of *dura* and *dukhn* exports is that the Council expressed fears that the policy will have negative consequences on the general local food security; and wrote to the Governor:

1/. I have received with thanks your letter No. regarding the export of *dura*, *dukhn* and sesame.

2/. The letter shall have its normal channel, and the maximum possible publicity; but I thought, it may be interesting to bring to your notice, without prejudice to the Council of Ministers' decision that these essential commodities have disappeared altogether from the Market, and the prices have arisen madly.

3/. The prevailing market prices for a Mid of 7 Rottles are:-

(1) *Fatarita* from P.T. 5 TO P.T. 10

(2) *Zinari* " P.T. 6 TO P. T. 12

(3) *Dukhn* " P.T. 6 TO P.T. 10

4/. To be more realistic, I feel that if this state of export shall take a wider scope, local conditions shall be more serious, and it may lead to a general famine.

(Town Clerk; *El-Obeid* Municipal Council, Nov. 1954. NRO; *Kordofan*; Vol. 1 & 2: *Obeid*. No. MC/E1- d/28-B-1).

The Governor's response to the Municipal Council's fears about the likely negative food security effects of food exports were that the export policy should continue, and

that food can be imported from outside the region, notably from areas of surplus such as *Sennar* and *Kosti*. As for the sharp price rises, the Governor saw the issue in a moral light in which merchants were to be persuaded not to push prices too high, and wrote to the municipality:

I am afraid the question of banning the export of *Dura* cannot be considered at present. Nor am I prepared to recommend that price control as far as *Dura* is concerned should be imposed in *El-Obeid*. ...

I wonder whether the present rise in *Dura* prices is not due to the seasonal shortage which normally obtains just before the new harvest is gathered. There is enough *Dura* in other parts of the country, e.g. *Sennar*, and *Kosti* Districts and you should impress upon local merchants the necessity of importing *dura*, if needed.

As regards the price I think the Municipal Council should bring moral pressure to bear on merchants not to raise the prices too high.

(Governor, *Kordofan*, Nov. 1954. NRO. *Kordofan*; Vol. 1 & 2: No. kn. p/15.A. 2/12)

The municipal authorities in a meeting at *El-Obeid* considered the government's instructions to continue the exports of *dura* and *dukhn*. The Council agreed on certain resolutions which were passed to the Governor of the Province to pass them on to the Central Government in *Khartoum*. Their resolutions are expressed in the following letter;

That in view of the acute shortage of *Dura* in *Kordofan* and the neighbouring *DarFur* Province, and the bad harvest of this year, (according to reports of Experts, Traders and Omdas) that you be approached with a request to contact the Higher Authorities to reconsider and cancel this Open Licence for the export of *Dura*, and *Dukhn* from Sudan to abroad, and to impose restrictions on the export of these essential commodities, the necessity or lack of which may lead to a famine, in these Western Provinces, which can not in any way be self contained. It has been the drill during the last years that both Provinces were partly dependent on their *Dura* and *Dukhn* resources on the *Gezira* and *Gedarif* Areas; the reason being that the local cultivators were attracted by the high prices of cash crops as Cotton, Sesame, and Ful Sudani; a fact that made farmers abandon the cultivation of *Dura* and *Dukhn* to a serious extent. (Town Clerk, *El-Obeid* Municipal Council, Nov. 1954. NRO. *Kordofan*, Vol. 1 & 2: No. MC/OBEID/28. B. 1.).

The Governor's response to the general Municipal meeting which included representatives from all the districts of *Kordofan* is that he had discussed the question of *dura* shortage in *Kordofan* with the Director of Trade and Commerce, and the Central Government policy stipulated that the export of grains should continue. And wrote back saying that "before the decision to export grain was made, careful consideration was given to *Dura* production in all Provinces including *Kordofan* and I am still not convinced that that decision was a bad one and for that matter it should be revoked" (Governor's Office, *El-Obeid*; Nov. 1954. NRO., Vol. 1&2: No. Kn. P/15.A.2/12).

As the Municipal authorities in their general meeting have exhorted, the official policy of food export resulted in an acute and widespread food shortage in *Kordofan* which impelled the authorities to seek importing grain from other parts of Sudan, especially from *Sennar*, *Kosti*, *Singa*, *Wad Medani*, *Jebel Mawya* in *Gezira* Province.

And from the *Red Sea* Province, *Dura* was imported to *Kordofan* from *Kassala*, *Gedarif*, *Dinder*, *El-Suki*, *El-Hawata*, and even from as far as *Port Sudan*; as well as from *Khartoum* Province, and *Karima* facilitated by rail transport. Indeed, the policy of food export and the commercialisation of food crops into the market made the food situation inside *Kordofan* particularly acute that the regional government under the urgency of the situation, encouraged merchants to import grain from *Kosti* where there was plenty of stock kept by the grain merchants at *Kosti*. A circular was issued by the Governor directed to the grain merchants in *El-Obeid* to the effect that a "*Hassan Karkab*, the merchant in *Kosti* informed that he can provide you with your requirements of *Dura*, if you can let him know of the quantities needed and prices. You are kindly requested to contact him" (The *Mudier*, 23rd Nov. 1954; translation mine). However, the Governor imparted that the grain merchants have a moral responsibility towards the public and it is their duty to help bring grain prices down and to ease the hardship on the population. A co-ordinated official effort was being mounted to move food grains into *Kordofan*. The Governor of the Blue Nile Province issued a corresponding circular to the grain merchants in his Province imparting to them the good market prospects for *Dura* in *Kordofan*, and made that widely known to merchants. In his circular, the Governor wrote to the District Commissioners of *Sennar*, *Northern Fung*, *Kosti*, *Dueim* in his Province instructing them that:

Would you please make it widely known among merchants in your districts that there is a good market for *Dura* in *Kordofan*" (Governor's Office, Blue Nile Province, Wad Medani, Nov. 1954. NRO. Vol. 1&2; *Kordofan*; No. BNP/2.F.5).

The letter was received by the Governor's Office in *El-Obeid*, and, for wider publicity, the letter was sent to the editor of *Kordofan* Newspaper, for immediate publication, and was also speedily dispatched to the District Commissioners administering the various districts in the Province; i.e. *Tegale*, *Jebels*, *Messeriyya*, *Um Rwaba*, *Bara*, *En-Nuhud* and *Kadugli* to take effective action by alerting the merchants in their areas to import grain from *Kosti* and *Gezira*. Under the circumstances of the food shortage, and in order to make a decision with regard to exporting grains, the regional government authorities were compelled to know the precise quantities of grain available and the level of shortfall and prices prevailing. The authorities instructed the regional produce market clerks to provide them with these vital information which is required by the Central Government to decide on the question of grain exports. In a rather curious situation, food grains although they have become an important commodity of trade in the domestic and export markets, nonetheless remained absent from actual delivery into the official produce market. This stands in contrast to the other agricultural commodities such as gum Arabic, sesame, groundnuts, melon seed, whose sales and transactions was to be conducted only through the regular organised produce

market. and outlawed outside the organised market. Indeed, the organised market transactions follow a set of injunctions to regulate the market operations. In theory, however, the organised produce market regulations apply to all kinds of produce, including *dura*, and that no transactions should be conducted outside the organised produce market. Notwithstanding, *dura* sales were conducted outside the proper produce market. The Town's Clerk in response to the Governor's request to provide him with exact quantities and prices of *dura* sold in the market replied that "we have no accurate record of *Dura* imported from other main *Kordofan* Districts as most of the quantities arriving into this Municipality are being sold outside the market". And that "*Dukhn* and *Fetarita* are not included in the Statistical Return ... that they are sold in open markets and that they are not amongst commodities to be auctioned in the produce market" (Town Clerk's Office, *El-Obeid* 18th May 1955. NRO. Vol. 1&2: Nos. MC/OBIED/28.B.1; and MC/24. B.1- XR/28 B.1). The letter pointed out that "the merchants are still importing *dura* from other Provinces, and the following are the quantities imported into *El-Obeid* by rail [in] 1954 together with their average prices . This return also includes an approximate estimate of the quantities arriving from other main *Kordofan* sources":

Place	Feterita	Zinari	<i>Dukhn</i>	Mugud	Wadakar	Mayo	Total
<i>Kordofan</i> Prov.	-	8392860	61446	-	-	-	9007320
<i>Khartoum</i> Prov.	744660	302610	114660	-	-	14070	1176000
Red Sea & Kassala	214410	400470	850920	401730	641130	-	2508660
<i>Gezira</i> Prov.	9325050	2700600	2057370	6300	-	-	14089320
Total	10284120	11796450	3084396	408030	641130	14070	26781300
* Average price / mid	60m	70m	75m	65m	55m	70m	mm/mid

Source: Town Clerk Office, based on statistics, Produce Market; *El-Obeid* Dec. 1954.

* Average price: mm /mid (mm = 0.1% S£; mid = 3.2 Kgs.)

The Produce Markets' Superintendent, wrote to the Supervisor of the Municipality in response to the Governor's directives that "no quantities of *dura* arrived for sale in the Produce Market since 1951, and that small quantities arrived and sold in the street vendor's open market, in small quarter shops and in front of grinding mills following a decision from the Council". And added that " the traders import quantities of *dura* from the Provinces of the *Gezira* and *Kassala* "*Gedarif*", chiefly *Fetarita* and *Mugud* and it is not precisely known the quantities imported and types" (Produce Markets' Office, *El-Obeid* 1954).

However, by 1958, the regional food security situation deteriorated to such an extent that it urgently demanded the institution of a regional grain reserve under the Local Act "Province *Dura* Reserve, 1985". The Act stipulated that a special account to be known as "Province *Durra* Reserve Account" was opened to control the whole operation by the regional government. The regional Government would undertake purchase of *dura* from

contractors (grain merchants), kept it in public stores; and when need arose to issue these to District Commissioners for resale to public in cases of need - which issue will be made to at a price to be approved by the Governor's Office. The Act stipulated that contractors, i.e. accepted tenders, deliver *dura* ex Railways Stations. On receipt of *dura* from contractors, all contract conditions should strictly be observed. And that the *dura* allotted and sent to each District should be under the direct control of the District Commissioner concerned, and it should be taken over by a Board, where storage accommodation permits, this *dura* Reserve should be stored separately and apart as distinct from the ordinary *Shuna Dura*. Delivery of *Dura* to various Districts, and dates of despatches and arrivals should as far as possible be notified well in advance. All receipts should be acknowledged by wire immediately the *Dura* was received. Any expenses duly incurred by Districts would be debited to Province *Dura* Reserve Account for payment. The initial purchase price payable to the accepted contractors to supply *Dura* would be paid by this Office as and when the *Dura* was duly received. Government Transport Contractors were informed to be ready for the transport of *Dura* from *El-Obeid* and from other Railway Stations to the various District Headquarters (Governor, *Kordofan* Province, *El-Obeid* 27th April 1958).

It was thought that transport bottle-necks was the main reason behind grain shortage in *Kordofan*. As a result, a recommendation was approved by the Municipal Council that the Governor should intervene with the Railways Authorities to facilitate the transport of *Dura* from areas of surplus production to *Kordofan*. The Council resolved that *dura* is available in the areas of production such as *Gedarif*, *Sennar*, *El Haddad*, *El Suki* and *Medani*, but that the "present conditions of the railway transport, and the shortage in rail trucking capacity sufficient for grain shipment is the most detrimental factor in this regard which has caused and will continue to cause acute shortages in the quantities of *dura* arriving to *El-Obeid*. It becomes clear that if the grain merchants were to find greater facilities in rail transport from the Railway Authorities by way of increasing the rail trucking capacity in a systematic manner, provided that they give first priority in shipping, this grain shortage will certainly disappear". The letter imparted to the Governor that "the meeting has recommended writing to your Excellence to kindly contact the Railway Authorities to do the following: (1) To give first priority in shipping and transport from *Gedarif* and *Sennar* areas to *El-Obeid* to the following merchants who have the quantities of *dura* shown below, and which is ready for transport, and not yet shipped:

Name of Merchant	Name of Seller and Port of Shipping	Quantity ready for Shipment
Osman Ismail Fadlallah Mohammad	Yousif algham & Kuku Ali - <i>Gedarif</i>	280
Sheikh El Kamil	El Kurdi & Brothers - <i>Gedarif</i>	300
Awad Mohammad Ahmad	Jaafar El <i>Khalifa</i> Hassan - <i>Sennar</i>	160

2) To give first priority in shipping and transport by increasing the number of rail carriage to transport all quantities of *dura* required for import to *El-Obeid*, or to any other destination in the Province through *El-Obeid* grain importers whose names are shown below, or any other merchant either from *El-Obeid* or from any other area of *Kordofan*:-

- 1) Mohammad Ismail Musa,
- 2) Osman Ismail Fadlallah,
- 3) Mustafa Salim,
- 4) Osman Abbakar,
- 5) Muddathir Hamid (Agent; Abu el-I'la Co.),
- 6) Dafaalla el-Zailaai,
- 7) Awad Mohammad *Ahmad*,
- 8) *Ahmad* Abd el-Majid,
- 9) El-*Sheikh* El-Kamil (Agent; Osman Salih),
- 10) *Ahmad* Musa el-Hidirbi,
- 11) Shukri AArghatanji;

to transport from the following areas of production:-

- 1) *Gedarif* 2) *Sennar* 3) *El-Suki* 4) *El-Haddad* 5) *Medani*

3) That the Railway Authorities should observe to carry out these recommendations in the nearest possible future and in a systematic manner before the start of the rainy season" (*El-Obeid* Municipal Council, *El-Obeid*; May 1958. NRO. Vol. 1&2: No. MB/EL-OBEID/ 28-B-1; translation mine). The government policy of continued food exports from *Kordofan* has effectively instituted the commercialisation of food in the region for both production and consumption. Food grains no longer were produced for home consumption, nor surplus production in good years were reserved for the household food security. Instead, food crops have entered into the market also as cash crops; with the inevitable consequences of dangerously precipitating the local food security, creating the conditions of food shortages and famines.

5- 5- Government Revenue from *Kordofan* Produce:

Kordofan continued to be a major source of government revenue. The taxes that were imposed on *Kordofan* and levied by the central government included *tulba*, *qutaan* (animal tax), *ushur* (tithe), and *gibana* (royalty). *Tulba*, introduced in the Tribute Ordinance of 1901, was a tribute imposed on nomad groups based on an approximate assessment of the group's herds, and the tax is apportioned among them according to the relative wealth of the group's members by the head of the tribe (Daly 1985: 188). *Ushur*: was based on the Muslim *Zakat* of one tenth (tithe) of the land produce. It was imposed on all lands under rain cultivation. *Qutaan*: was a herds tax introduced in 1899. It consisted of 3% levied on camels and cattle; and 8% on sheep and goats payable in cash or kind. This was replaced in 1901 under the terms of the taxation of Animal Ordinance

by the Animal Tax. *Gibana*: was a royalty exclusively levied on gum Arabic. In a 1899 Ordinance, the *Gibana* royalty on gum was fixed at 20% ad valorem. The Central Government revenue from taxes in 1903 came to 24.7% of total revenue.

From the above account, colonial and post-colonial policies have sought to transform *Kordofan* production and exchange relations along the lines of the market. Market forces have been state institutionalised which had negative bearings on regional and local food security. A number of important observations emerge concerning *Kordofan* food grain situation. The first is that cash income from gum Arabic and other cash crops, i.e. sesame and groundnuts, stimulated both increased levels of production for cash incomes and a wide and varied consumption for manufactured goods. In addition, food grains have become an important item of trade in both the domestic and export markets. Effectively, this has meant increased dependency on the market for both production and consumption. The most critical aspect of this market dependency was the shift in *Kordofan* agricultural activity from the production of food to the cash crops production. Cumulatively, this had caused a serious shortfall in food production in *Kordofan*, which made it a food deficit region. Consequently, the region has since become an important trade zone for the grains merchants and their collusive practices for the benefits the grain trade can bring., especially from the *Gezira* and then *Gedarif*. On the other hand, the national policy of grain exports, and the shift in focus in *Kordofan's* agricultural production from food to cash crops led to a continuing inverse ratio between the region's production and consumption needs of food grains, which in turn translated into consistently rising food prices. This has become one of the most negative aspects of the impact of the market on the rural economies of *Kordofan*. The argument that cash returns from cash crop production would buy the food the people need did not occur. While food prices have risen continuously, earnings from cash crops have fallen. In effect, local producers are placed in an unenviable situation of precarious and insecure food needs since the food grains have ushered into the market. *Kordofan* has become a food deficit region and, in effect an important trade zone serving the interests of the grain merchants and the powerful national agrarian lobby. It is also a region of vast cash crop resources which contribute the major part to the government revenue. The Central Government aware of the strategic importance of *Kordofan* agricultural and animal produce to generate the foreign exchange earnings, needed to control the produce of the region through the pricing and marketing mechanisms. As a result, marketing state parastatals were established to control the pricing and marketing of the region's produce of Gum Arabic, oilseeds, and livestock which represent the vital sources of the region. Consequently, corporate companies have been set up, jointly by public and private sector capital, evidently to serve the intertwined interests of both the Central Government and the merchant class interests. These major parastatals are the

Gum Arabic Company, the Oilseeds Company and the Livestock and Meat Marketing Corporation (LMMC) which were established during national rule, especially during the *Nimeiri* years at the behest of the honeymoon with USA relations and the economy was oriented to a strict American-styled market economy under the "open door policy". Under this period, *Kordofan* resources are virtually pillaged, the food situation grew ever more disparate and acute shortages occurred. Cash crop prices declined, the local economy suffered from the massive drain and exploitation, which in turn translated into wide scale environmental degradation. These trends rendered the local populations extremely vulnerable, such that when droughts hit in the 1980s and 1990s, the local populations were already too impoverished and weakened to withstand the shock, and the drought triggered these long-term trends into famine. Indeed, the succession of three large-scale famines in less than two decades between the seventies and nineties can not be blamed on natural phenomena alone, but have to be explained in the context of the "politics of famine": the state of utter exhaustion and extreme vulnerability to the vagaries of nature to which the local populations have been rendered through a long process of underdevelopment, political marginalisation and economic exploitation over many long years, essentially through the agency of the state.

5- 6- POLICIES OF TRANSFORMATION:

The developments which have been taking place in the centre of economic and political power aimed towards restructuring *Kordofan* economies and their final incorporation into the wider national and international market system, necessitated certain policy programmes to bring about the transformation of the rural economies of *Kordofan*. We identify the following policies promoted by the central state to effect the requisite changes.

5- 6- 1- Development of rural water supplies and resettlement programmes:

In 1946, a Rural Water Supplies and Soil Conservation Board was set up within the Ministry of Agriculture to provide water supply to rural areas in order to encourage resettlement of pastoral and nomad communities; and to administer the execution of the programme. Thus in the first fifteen years of its existence, the Board has been concerned with excavating *hafirs* (surface water reservoirs) using modern earth moving machinery. The aims of the programme were to develop water supplies in new areas where people can move and settle permanently for cultivation of lands around the new water points. Without a fairly good distribution of water points, many areas could only be occupied during the rainy season, or immediately after it, while ephemeral rain pools lasted. As the season progressed, people could make only the occasional forays to their farms; and after the harvest, such areas were completely abandoned (Davies 1962). The main policy concern of the programme of the Rural Water Supplies was to encourage

settlement for cultivation, although pastoralists could benefit from improved water supplies too.

During the first five years, the Rural Water Supplies and Soil Conservation Board excavated 138 *hafirs* in *Kordofan*. The policy has ever since been pursued more vigorously and even extended to more fragile ecological zones, especially throughout the 1960s and early 1970s by the department, now under the name of the National Water Administration. At this time, the focus has been shifted to the digging of more motorised boreholes, than on the excavation of *hafirs*. Thus, between 1966 and 1972, about 900 boreholes have been drilled in *Kordofan*, and consequently the historically waterless sandy *Goz* plains of *Kordofan* have been opened up for cultivation. Water supply which has previously been available only as a natural resource from the seasonal rains, and which largely determined the mode of economic practice and patterns of land use, is no longer a condition of natural availability. The big increases in the availability of water made possible by mechanical means has greatly encouraged sedentarisation, cultivation and stocking in and around the permanent water points and settlements.

5- 6- 2- Land tenure system and reform

Various land reform legislatures have been set up since the first days of the colonial administration in Sudan. Thus, in 1899, a Land Commission was established and a Land Act was made enabling the government to claim rights to any lands in the country. This act was superseded in early 1903 by another act; the Title to Lands Ordinance enabling the government to acquire land by expropriating all rights "for public interest". The Land Settlement and Registration Ordinance was promulgated in 1925, superseding all previous legislatures. According to the terms of this law, all unregistered land is deemed to belong to the government, but in practice, the government exercises its ownership as a trust for people who have habitually exercised rights over it. This applies to land which is cultivated at irregular intervals, or is superabundant. In this case, land is held as communal, and administered by the authorities of the tribe, village or other communal unit, and individual rights obtain to all members of that unit to use the land and its resources according to the set norms of practice, or as the authorities of the communal unit direct. This law was in time replaced by another legislature, this time in the Land Acquisition Ordinance, 1930, which enabled the Governor-General to acquire land for public purpose on payment of compensation (Bolton 1948). These various land legislatures in Sudan have not significantly altered communal ownership of land in central and Northern *Kordofan* districts. However, the legal status of land remains to be state property, and allocation of land has been vested on the native authorities who act on behalf of the government.

In the rural areas, the village farmers cultivate the land around their village. The legal status of land in the rural areas of Sudan all belong to the state. This obviously entails a serious alienation of the land resource as the main factor of production from its traditional legitimate owners to the state as the legal appropriator of the land. Although, this is the official legal status, the real powers are vested in the hands of the village *Sheikhs* who are lawfully authorised as guardians and delegates acting on behalf of the government for control over and allocation of the land and range resources. There is no formal registration of farm lands by individual farmers, although individual persons have the absolute rights to the lands granted to them by the *Sheikh*; provided that they keep it in use, and can dispense with it accordingly. It should be stressed, though, that the underlying general principle governing the utilisation of land resources is communal ownership. Land is regarded as a common property, and the resources and range are managed communally according to set rules of practice for the benefit of all members of the village community. In practice, neither the *Sheikh*, nor the government on whose behalf he acts can in truth alienate the land from its traditional users without causing much trouble and tension. Nonetheless, the official legal status of land is that it remains the property of the state.

In areas of the *hashab*, the government ruled that priority for cultivation be given to land where *hashab* trees ceased to be productive and the tapping of gum gardens which sprang up in abandoned cultivated plots. This is considered to be the most economically and ecologically sound method of agricultural practice to ensure the survival of the *hashab* trees in the agricultural cycle. The *hashab* gardens and the gum obtained from them became the backbone of the *Hamar* economy, and in effect, encouraged large sedentary settlements around the *hashab* forests, while previous to that, settlements in *Dar Hamar* had been mainly around sufficient numbers of *Tebeldi* trees to ensure permanent water supply, and such settlements were smaller in size. The effects of these policies have been rapid sedentarisation concomitantly with an alienation of land from the original users. Official statements as early as 1910 confirmed that land ownership is being systematically moving from communal to private ownership. The effects of this change has been the replacement of the revitalising regenerative fertility-enhancing longer fallow cycles by a more degenerating fertility exhausting intensive cultivation of short fallow cycles. As such, land quality and fertility degenerates, yields fall, and need is pressing to bring ever more land under cultivation each year. The inevitable consequences are wind-blown erosion, loss of grass cover, degraded ranges, shortages of wood for fuel and building, and ultimately large-scale environmental degradation.

The Sudanese governments' straight-jacket answer to these problems has invariably been to promote the mechanisation of agricultural schemes, and the resettlement of pastoral communities. As a result of these strategies, mechanisation of agriculture was

vigorously encouraged in the relatively better endowed areas of Southern *Kordofan*; which have more fertile clay soils and better rainfall. Indeed, the contrast in natural resource endowment between this Southern part of the region and the central part which is more densely populated but relatively less endowed in terms of rainfall and soils, has set the scene for a major planning issue for *Kordofan*: should priority be given to improving conditions for the vast majority of rural producers in the middle belt, or should priority be given to maximising agricultural output on the Southern clay soils by introducing mechanised traction and establishing large-scale commercial enterprises. Against this background, it is understandable where the central state planning sympathies lie. Accordingly, planning thinking emphasised the potential role of *Kordofan* (and Western Sudan generally) as a major food supplier for the country as a whole, and even for the Middle East. Other views have drawn attention to problems of environmental degradation, as well as to the inevitable consequences towards emerging polarisation between the large number of small-scale agricultural and pastoral producers in the small farm units, and the large-scale mechanised enterprises in the mechanised commercial farms (Haaland 1991). Consequently, the area under mechanised farming has expanded dramatically during the past twenty years or so, while there has been virtually no efforts towards solving the problems of the small family farms. In this context of development planning, and in 1968, a decision was made to develop mechanised agriculture in *Habila* in Southern *Kordofan*, no doubt reflecting the influence of powerful interests over central state decision-making and planning processes. And the espoused aim of providing food security for the region and for the whole of the country, the opposite is in fact true. The commercial farmers join the grain merchants lobby, forming a powerful regional and national cartel who among themselves control the regional grain trade and manipulate prices to their own gains; especially during times of food scarcity, thus contributing directly to the development of famine in the region. Ironically, far from achieving regional food security, the development of mechanised agriculture has indeed curtailed pastoral grazing lands, controlled the best lands in the region, caused progressive environmental degradation and soil exhaustion, and contributed to increased polarisation in which the vast majority of the rural populations are drawn to the mechanised commercial farms as seasonal farm labourers.

The Sudanese governments have invariably concentrated their efforts in terms of development allocations, of finance and man-power onto the mechanised modern agricultural sector to the total neglect of traditional agriculture. Nor has this orientation in official government policy been a random purposeless choice, but has been motivated by powerful interests. Indeed, agricultural policy reforms in Sudan reflected the balance of forces of power and the structural political and social arrangements which make up

the Sudanese state. These forces have consistently sought to hold the reigns of political power for the furtherance of their own economic ends. In this context it is easy to understand the relationship that has been officially created in the dual agricultural policies of development wherein traditional agriculture has been not only deprived from necessary development allocations, finance and other inputs all of which have been channelled to support the modern agricultural sector, but worst still has been very heavily taxed and squeezed to yield badly needed hard currency which can be directed to subsidise the modern mechanised agricultural sector. This paradoxical bias can only be understood in its political context, in the character of the Sudanese state and the forces of political power who manipulate the nature and direction of state policies for their own economic advantage.

The deprivation of traditional agriculture from necessary inputs, has led to a most critical outcome for the long run; namely environmental degradation. This has come as a logical consequence of the type of exploitative policies with regard to the traditional agriculture, which treated this sector as a "mine" to be tapped, without the least regard to the necessity of sustainability of the natural resources in these inherently fragile ecosystems. The lack of policies in any forms directed to sustain the natural resource base of *Kordofan* rural environments, and the treatment of *Kordofan* resources as a wealth to be mined for the benefit of the modern sectors, underlies the fact that there has never been any efforts on vertical development of *Kordofan's* traditional agriculture in forms of improved yields, research or extension facilities and other supportive services. This naturally implied that for the natural economic resource base of *Kordofan* to yield the level of production necessary to generate the foreign currency to subsidise the modern sector, has to come from increased horizontal expansion. Understandably, the development of natural resources in *Kordofan* has systematically followed the trend of horizontal expansion into more and more marginal fragile lands, with the inevitable consequences of declining yields, degraded soils and ultimately the wide environmental disaster in recent decades.

The policy of settlement around water points, and the concomitant land reforms, has also created problems. On the one hand, on the national political level, it facilitated the control and exploitation of *Kordofan* rural labour for the benefit of the state and its hegemonic interest groups. On the other hand, on the local level, it encouraged excessive exploitation of the natural resource base by overcultivation and overgrazing, with the consequences of rapid deterioration of land quality, soil exhaustion and a process of desertification around the new water sites. Ultimately, the ecological balance which was formerly maintained by a parity between social needs and available natural resources has been upset by increasing pressures and demands imposed by the new forces of change.

The shift ushered in a new era in the socio-economic and political history of the region. It marked deeper fundamental changes in the local production systems and resource management and control, shifting resources away from their traditional uses of pastoral production towards regimes of agricultural labour production for the market, and from immediate local communal management and control to more centralised state control. The processes of change have transformed not only the traditional systems of management and control of rural resources, but more critically they have involved structural alterations in the production system itself by the introduction of new products in the form of cash crops; and in basic human labour relations. It thus became imperative under the new conditions that people produce for the market, as well as to fend for their families. This leads us to consider the conditions under which the structure of rural resources has been altered to bring about lasting socio-economic transformation in the regions of *Kordofan*.

5- 6- 3- Changes in the regime of rural resources:

The local production system has traditionally been geared primarily for household consumption. Small surplus production is exchanged locally for other household needs. Both animal and farm products are directed to meet basic subsistence needs of the household. Under the new conditions, this subsistence production has undergone fundamental change in which traditional products are no longer confined to meet subsistence needs, but surplus production is vigorously sought in its own right to be channelled to the market for cash earnings. Consequently, marketable surpluses have been sought both in traditional crops such as sesame, and in newly introduced crops such as groundnuts, while other traditional crops have been demoted and discouraged such as cotton. Most significant of all, is the transformed status of food crops which under the new forces of change assumed a dual role of being both food crops and cash crops that are bought and sold in the market. In this context, surplus production of food grains such as millet and *dura*, in the past are stored in *Matmuras* to serve vital food security function as reserve food stocks. This is no longer the case, since under the present conditions of the market, surplus production of food grains immediately finds its way to the market for cash, than be stored for local food security. Thus, the whole structure of the traditional rural resources have been altered, by the introduction of new cash crops, marketable surplus production of traditional crops, discouragement of cotton production, and by the incorporation of food crops in the market.

6- 6- 3- i- Official ban on local cotton production:

Some agricultural products received active encouragement by the state official policy intended for increased production of cash crops such as sesame and gum Arabic, for the

realisation of marketable surpluses, (with negative implications for resource management and control and future security). Other crops of important value, such as cotton, has been discouraged, indeed banned from local production. In about the early 1930s, the colonial government in Sudan, encouraged by the marvellous success of the cotton schemes in the *Gezira* in central Sudan along the Nile, wanted to boost the British cotton textile industry by opening up the Sudanese colonial market for the British cotton manufactures. However, the local Sudanese cloth market needs at the time have been largely met by the local cloth industry, variously called *Damur*, *ganj* or *gazzaziyya*. Cotton was grown by the villagers in small area reserves on the clay soils, and it grows sufficiently well to produce enough quantities of raw cotton to enable the village populations weave their own cloth needs. Indeed, it has been suggested that cotton is an indigenous plant to Sudan. The earliest evidence of cotton in Sudan, provided by fabrics found in the *Meroitic* tombs dates from about 50 BC (Bacon 1948: 324; Tothill 1948). The entire cotton production is consumed locally, and woven on hand looms into coarse native cloth called *Damur* or *ganj*. It was reputed for its hardness and durability. More importantly is that it satisfied the local cloth needs, and provided the local weaver specialists with lucrative income earnings. A measure of the widespread significance and popularity of the *Damur* can be attested to by the fact that it even assumed the status of currency throughout Sudan since about the sixteenth century and was involved in all forms of local transactions. And in the eighteenth century when Bruce travelled through Sudan, he recorded that the manufacture of cotton homespun *Damur* was the chief source of livelihood among the inhabitants, and that such cloth was extensively used as currency (Bruce 1805). This tells us a great deal about the capacity of the local populations to adapt their social needs to the physical resource availability of their local environment. Adaptability is thus a measure of balanced relationships between the physical available resources, managed under local norms and by local technology and expertise to satisfy human social needs, and the balanced relationships maintain the ecosystem in a state of permanent equilibrium. The traditional cloth industry was thus deeply entrenched and long established in the local economy. It follows that for the Sudanese colonial state's policy of opening up the Sudanese market for the foreign textile industry will meet with strong competition from the local cloth industry. A pre-requisite for the policy to succeed and capture the market is to dismantle the local industry in order to pave the way for imports of foreign textiles. The policy of dismantling the local cloth industry took a three-pronged programme carried out in concert: (1) official banning on local cotton growing, (2) initial free distributions of finished textile fabrics to the local village populations, and (3) subsequent flooding of the local market with fine-finished textiles from outside markets.

5- 6- 3- ii- Official ban on *Damur* and local cotton growing:

The traditional cottage industry of the handloom weaving of coarse unbleached cotton cloth *Damur* from locally grown cotton was widespread. The *Damur* was coarse and hard-rearing, but was in great demand, especially among nomads, for whom hardiness and durability was more important than fineness. The *Damur* weavers wanted to expand production and were evidently capable of doing so. However, the Director of Agriculture pointed out that the *Damur* weavers' raw cotton was stored as unginning seed cotton, and that "the storage of this seed cotton [represented] a grave danger to the growing of cotton [in the *Gezira* and along the Nile banks] because of the risk of carry-over of the pink boll worm from one season to another" (Sanderson 1985: 105). Following the Director's recommendation, the Board of Economic and Trade, at its meeting in February 1936, came out with a resolution to ban the production of *Damur* as a means of discouraging the use of unginning cotton lint (Ibid). This effectively put an official ban on the production of local cotton and the manufacture of *Damur*.

5- 6- 3- iii- Free distributions of foreign-made textiles:

This policy was carried out through *Omdas* and *Sheikhs*, who were entrusted to undertake the free distributions of cloth to the village populations, while simultaneously oversee that no cotton is grown in the areas under their juridical authority. It is related by some of the elderly informants who witnessed the scenes and were then young, that the *Omda* of the area came to the villages loaded with bales of finished cloth, accompanied by some police guards, and from the residence of the *Sheikh* of the village, called upon the village populations to come and have their free ration of cloth to clothe their families. They called in a rhyming tune: "*ya ahali ya masakin --- ta`alu iksu al awlad wa`l a`awin*"; meaning "Oh, you poor natives, come along and clothe your women and children".

5- 6- 3- iv- Flooding the market with foreign textiles:

These initial free distributions of cloth continued for a while, concurrently pushed with a promotion of a new cultural ethos centred around the appreciation of fine, exquisite and colourful clothes; and a new taste for fineness and exquisiteness took the hitherto rough rural rustics with contagion. And from that time on, the rural taste for clothes is altered, and the village populations sought the satisfaction of their cloth needs not from the local *Damur* weavers, but from the British, Egyptian, Indian and Japanese refined textiles of all sorts: cotton, silks and wool which flooded the market and became readily available for whoever can afford their prices. And with this deluge of fine clothes came complementary items such as soaps, perfumes, shoes etc. and other consumer products. In effect, the traditional cloth-making industry based on local cotton production, and adapted to local conditions and technology

for the satisfaction of social needs, has thus been sadly eradicated. The satisfaction of social needs for clothing is no longer a matter of local conditions and local resources, but came under the effective control of the import/export trade, the foreign textile industries and the prices dictated by the market. In the final analysis, the local populations have been turned from being producers of their own needs into consumers of imported goods.

The relevance of the changed conditions of the traditional cloth-making industry to our present concern on local food security, is that the village populations and households have to earn cash money in order to pay for their clothes, which need had formerly been satisfied by their own labour and from their own cotton production. Under the new conditions, clothing the household members has come to claim a substantial share of the household income, especially that the prices of manufactured goods have been steadily rising vis-à-vis their incomes from agricultural labour. In order to earn the cash money necessary to clothe the household, they have to increase their saleable cash crops and to increase their labour input. As a result, increasing the capacity for cash crops production became the only viable option for cash earnings needed to buy clothes. The implication of this to the household food security is that households will have less labour time and less land to devote to producing food, and less cash for buying it. Moreover, the massive increase in the area of land cropped with cash crops, especially groundnuts, has greatly reduced the quality of land, exerted pressure on the land by intensive farming, and exposed the land surface to the eroding process of wind. In turn, wind-blown erosion adds to the process of desertification, and ultimately environmental degradation

CONCLUSION:

This chapter has argued that the persistence of famine in *Kordofan* can be explained in political terms associated with the integration of *Kordofan* into the modern Sudanese state and the policies pursued by the state to transform *Kordofan* economies. Colonial and post-colonial policies have sought to transform *Kordofan* production and exchange relations and integrate them into wider national and international systems. The transformation of *Kordofan* rural economies have been carried out ostensibly to bring out the social emergence of rural communities to engage in the benefits of trade, and for state building and national integration. In truth, however, the policies of the state have institutionalised market forces to exploit *Kordofan* natural resources for the benefit of the state's political and economic elites. *Kordofan* is endowed with great natural wealth which invalidates explaining famine in the region in natural terms. That wealth had been appropriated by the state and contributed significantly to the exports of the country as a whole. The boom or recession in the national Sudanese economy can be easily

correlated to the up and down fluctuations in *Kordofan's* agricultural production levels. Ironically, in spite of all that, the producers in rural *Kordofan* suffer the worst effects of impoverishment, hunger and famines. The catalogue of ills which befell *Kordofan* can be located in the rise of the modern Sudanese state, the emergence of central social forces who came to dominate the state and the economy. These emerging political and economic forces wielded virtual control over *Kordofan* resources. The crux of the problem lies in the issue of resource control and management. The state and the economic elite allied to it both manage *Kordofan* resources for their own advantage. The state's policies caused drastic shifts in the established patterns of local resource management. The state's development policies entailed shifts in production patterns, which encouraged producers to concentrate more on cash crops. On the other hand, this has shifted the control over rural resources away from the actual producers (who in the process become mere labourers) and placed them in the hands of the more economically powerful groups (mostly the *Jellaba* from Central Sudan) who are allied to the state central functionaries. Both interest groups have vested interests and high stakes to exercise effective control over *Kordofan* resources. But for this control to be effective, needed that the people of *Kordofan* be excluded from decision-making both on the central and regional levels, such that *Kordofan* interests can not be articulated. This indeed explains the systemic efforts from the part of the central interest groups to marginalise the region politically in order to exercise the systematic exploitation and mining of *Kordofan* resources. The control over *Kordofan* resources ultimately bred the pervasive poverty and vulnerability to famine.

Chapter 6

Transformation of the Village Economy

Introduction:

This chapter assesses the impact of change on the village economy. It argues that the processes of change which have been taking place since the turn of the century have been the outcome of official state policies. These have been embodied in concrete policy programmes such as the encouragement of cash crop production, the discouragement of local cotton production, commercialisation of food crops, the organisation of markets and trade, and the commercialisation of rural labour relations. These have cumulatively transformed the rural social and economic systems rapidly and profoundly. The composite of policies of the Sudanese state to transform the rural economies of *Kordofan*, have brought short-term gains, but long-term and enduring losses for the local populations. On the one hand, the forces of change have initially created new opportunities and new avenues for income generation. The local populations responded in the early stages enthusiastically to seize on the new opportunities offered. Cash returns from their agricultural labour, however small and declining in real value, have been expended to acquire a wide array of foreign-made consumer goods, made readily available in the markets. Thus, the whole scale of their material needs and demands has been thrown upwards by the increased circulation of liquid money and the simultaneous availability of consumer goods. The expansion of trade vastly increased consumable goods in volume and variety, and profoundly altered consumption patterns. Thus, fabrics of all sorts and makes, and items such as soaps, perfumes, shoes, beverages, sugar, coffee and tea, metalwork, cigarettes, tobacco became common consumption items in the village shops. On the other hand, the impact of change on the local systems created deep-reaching and profound long-term negative effects. They have altered traditional resource structures, management and control systems. They have caused profound changes in the allocation of land and labour resources, with a reallocation of the major part of these resources to cash crops, and away from food production. Households' sources of income generation, consumption regimes, and patterns of expenditure have also changed. Rural labour markets developed, concurrently with the rise of a new class of rural traders, taking advantage of the new developments, hiring the labour of poorer households to till their farms, buying the village produce, and making gain and profits. Production expanded dramatically, especially that of cash crops; e.g. groundnuts; and cultivation expanded into more fragile lands with grave ecological consequences. In the process, certain groups among the village community benefited, while others lost. The losers in this process suffered from famine, since they had already

been fully exposed to the vagaries of nature; their fall-back options severely curtailed. This chapter traces the processes of rural transformation in *Dar Hamid* and *Dar Hamar*. It assesses the impact of change on local production and resource management systems, and ultimately how this bears on local food security in the two communities.

6- 1- Adaptations and Response to the Forces of Change:

In the previous chapters, we have seen that the *Hamar* and *Dar Hamid* before the nineteenth century were largely pastoralists moving with their herds in the North-central zone of *Kordofan*. The policies which have been adopted by the state to bring about the rapid settlement of the pastoral communities, like the *Hamar* and *Dar Hamid*, quickly bore fruit. That was especially so because these groups had already lost most of their herds during the turbulent years of the *Mahdiyyia* and the Condominium invasion. The *Hamar* and *Dar Hamid* settled in the thousands of villages dotting the central sandy plain of *Kordofan*, the homeland of the Acacia tree. A rapid re-organisation of their economies has been set in motion centred around agricultural labour production and gum collection.

The transformation of the *Hamar* and *Dar Hamid* economies from the pastoral to the agricultural mode of production entailed a loss of employment; that while pastoral production ensured that participants were fully engaged in an all year-round activity, agricultural labour, on the other hand, provided only seasonal employment for a maximum of 4 - 6 months a year. For the rest of the year, the rural farmers engaged in a range of non-productive activities. And due to the lack of alternative job opportunities in the local economy, they have little to supplement their incomes which derives primarily from agricultural labour in the main season. This is the time when many of the village able men migrate to other places in search of work. This is an important factor to explain the lack of capital accumulation for the majority of people in the rural economy. It is indeed, instructive to see that those who have relatively large herds of animals fare generally better, wealthier, more secure and fully busy with their animals throughout the year. On the other hand, peasant commodity producers become increasingly dependent on the domestic and international market as producers and consumers. The village communities seized on the new opportunities offered to them and the avenues of income generation opened by the re-orientation of the local production systems. The majority of the *Hamar* and *Dar Hamid* now settled as sedentary cultivators; and quickly acquired the techniques and knowledge of agriculture, aided in this by a diffusion and infusion of agrarian and botanical culture from their neighbouring traditionally agrarian communities; i.e. the *Fur*, the *Gawama'a* and the *Bidariyyia*; and to a lesser extent from the *Nuba*. The *Hamar* and *Dar Hamid* responded enthusiastically to the forces of change, and adapted their way of life from pastoralism to sedentary cultivation in a

record short period of time. They quickly adapted and acquired a thorough knowledge of the farming culture. Farming techniques have been developed to suit the ecological conditions. Different crops have been found to be suited to different micro-environments; soil types, altitudes, temperature and water requirements. The range of knowledge and skills which they have evolved and adapted can not be exhausted; but the following are a few areas of knowledge to illustrate the capacity of the local people to adapt to the forces of change brought to bear on them by external forces.

6- 2- Farmers' Knowledge:

It is difficult to provide an exhaustive description of the variety and richness of the farmers' agrarian knowledge. The information in this section has been collected from the local people during the field-work, and from my own personal observations. Farmers have become extremely knowledgeable about the characteristics of the micro-environment. They distinguish between different types of soils and suitability of certain soils to particular crops. They distinguish between four sub-group soil types of the two main ones: the sandy (*Goz*), and the clayish soils. Within the first soil type (the *Goz*), two sub-groups are distinguished each suitable for particular crops. The reddish sandy soils of the *Goz* (known as the *Hamraya*) are suited for millet cultivation; whereas the loose sand soils are reserved for groundnuts. The second main soil type is the clay soils, which has two sub-groups; the sandy clay (Known as *Juraba*), and the alluvial clay soil (known as *Tayna*). These are suited for the cultivation of sorghum, sesame, and okra.

Farmers also know about the level of soil fertility and ability to sustain crops. They employ crop rotation to maintain soil fertility. For example, farmers usually switch, after one harvest or two of cultivation with groundnuts, to sow the cropped area with millet. This crop-rotation technique is intended to maintain soil fertility. After several years of cultivation the soil is exhausted, then the land will be left fallow to rest for a couple of years to regenerate. In this way there are two mechanisms of soil conservation practice: a short "maintenance" technique based on crop rotation within the prime span of the soil fertility, and a longer "regenerative" technique of the fallow cycle. Certain crops are inter-cropped on the same plot, others are cropped alternately in rotation. Such farming and cropping practices are intended for the optimum exploitation of the available water (moisture), soil nutrients and land resources.

Farmers also have plant indicators to judge the conditions and fertility of soils. The appearance of certain weeds, such as the *strega* weed, indicates declining soil fertility on which strategic decisions of land use are to be made. The appearance of such weeds would necessitate leaving the land to lie fallow for a couple of years to regenerate. Another technique is shifting cultivation which "was less a device of barbarism and more a concession to the nature of the African soils" (Lord Haley 1938; cited in

Richards 1985). Other forms of soil conservation and regeneration include forms of organic fertilisation, such as animal and green manuring, the planting of cover crops and forage and mixed cropping.

6- 2- 1- SEEDS SELECTION AND MIXED-CROPPING:

The village farmers look for certain desired qualities in the seeds of crops they want to sow. They select seeds which are drought-resistant, quick-maturing, and high-yielding. Seeds of grains that have the best qualities are carefully selected at harvest time and put aside to be planted the next season. Inter-cropping and mixed-cropping have a long history in *Kordofan* farming traditions. The merits of this have been widely recognised (Norman 1968; Howes 1979; Richards 1979, 1985; Mortimore 1989; Belshaw 1979). In contrast with the science-based mono-cultural cropping regimes which seek to impose uniformity and control of high-yielding crop varieties that flourish under artificially created and highly simplified ecosystems and supported by non-biological inputs (Howes 1979), mixed-cropping regimes seeks to make the best of the ecological diversity, capitalising on the multifarious opportunities offered by the natural environment. Mixed-cropping is more sound environmentally. It accords more naturally with the biotic diversity in the eco-system, and is more in harmony with ecological balance, with the biotic and genetic diversity, and long-term sustainability and conservation. It emphasises complexity and species diversity rather than simplicity and uniformity.

Inter- and mixed cropping increases productivity per unit of land. The planting of different crops in the same unit of land yields higher cumulative output than if sown with pure stands of one crop (Howes 1979). Mixed-cropping affords intensive farming; i.e. the co-existence of different plant species, having different stem lengths "serves to optimise the intensity with which a given unit of land may be exploited" (Ibid). It also optimises labour input. The different crops simultaneously sown in a unit of land would demand different labour requirements spread over the different farming operations serves to "smooth out" peaks of labour demand (Igbozurike 1971). It allows optimum exploitation of soil nutrients. The different rooting systems of the various inter-cropped plants ensure that they do not compete with one another for soil nutrients and moisture at any one level, but exploit different levels of the soil profile. Mixed cropping also allows symbiosis or mutual benefits. Mixed crops often provide a favourable micro-climate for one another. And it permits biological complementarity. Inter-cropped and mixed cropped plants can complement one another in different ways, as for example, in the case of nitrogen-fixing plants grown with non-nitrogen-fixing ones, e.g. groundnuts grown with water melons. Mixed-cropping is used as a measure of pest and disease control. Seeds of plants scattered among another species often serves to ,protect the minority plants from diseases and pests which may otherwise destroy them if grown

solo. An example of this in central *Kordofan* is gourds inter-scattered through the fields so that at least a proportion of the crop escapes the attacks of the melon fly. It also serves as weed control (Howes 1979). Mixed-cropping is an important soil conservation technique. It protects the soil from erosion by providing dense vegetation cover, and also conserves on the water resources and reduces loss of soil moisture through evaporation since the rain-watered soil surface is protected by the vegetation and shade from direct sun heat. The different crops to be harvested from the mixed-crop farm diversify and enhance the household food security and dietary balance. Farmers gave the additional reason that mixing of food crops produced a wider variety of foods over an extended harvesting period, therefore adding variety to the diet regimes and enhancing household food security. It serves to minimise risks. Avoidance of risk, or minimisation thereof is an important factor in adaptation of the mixed-cropping farming technique. Farmers pointed out that single or pure stands crops may fail to germinate, or may get damaged by bad weather conditions or pests. Mixtures provide a good chance that at least part of the crop would survive if such adverse conditions occurred. Like other indigenous stock and adaptive skills, mixed-cropping, as an indigenous farming practice, illustrates the sophistication and complexity of the local farmer's agronomic skill and knowledge

Different harvesting times are used to increase the harvest. An important harvesting strategy used by *Kordofan* local farmers is early harvesting of millet which is carried out in early Winter. This early first "main" harvesting called "*Ain*" allows the millet to take advantage of the soil moisture in the cool Winter season in order to allow for re-growth; and a second millet harvest called "*kusheib*" to come up in late Winter.

6- 2- 2- PEST CONTROL:

Pest-control mechanisms include, besides mixed-cropping and rotational farming, other more concrete strategies, such as bird scaring and the physical liquidation of pests, e.g. locusts are eaten in many farming communities in the Sahel belt, including *Kordofan*. Besides directly contributing to supplement local diet by providing a source of protein, eating locusts can also be seen as an indirect pest-control measure. When locust swarms invade a farming locality. an almost ritualistic campaign is mounted: men, women, and children, all flock to the farms, setting the whole of the countryside ablaze with big fires to attract the locust swarms (for a vivid description see Achebe 1965).

6- 2- 3- INDIGENOUS CLIMATOLOGY:

A rich stock of knowledge, a special preserve of older men and women pertains to the conditions of the local climate. Some individuals may lay claim to the status of local climatologists who can forecast the weather conditions by observing the sky, the

positions and movements of the moon and stars. They can forecast a variety of climatological phenomena, as regards the rains and timing, heat, winds, and the associated level of water shortage and thirst, and the likelihood of pest invasion, such as locusts. Indigenous climatological knowledge functions not only as a form of socio-cultural adaptation to the conditions of the local environment, but also serves vital practical purposes. Knowledge, especially about the approximate start of rains is vital for local farmers to begin planting their crops even before the rains actually fall. This pre-planting, spurred by predictions that early rains are immanent, is intended to take advantage of the general air humidity and soil moisture that are made available by the cool dewy air pushing from the humid tropics at this time of year. Crops that are thus pre-planted, can remain in the ground for some time aided by the general coolness. If pre-planting has been successfully carried out, and coincided with the early rains as predicted, bountiful harvests may occur. That is because it will then allow crops to take the full length of the rainy season to allow for maximum growth. There are signs which the local communities identify as heralds to the start of rains. These include (1) the leafing of particular trees, such as the *Tebeldi* (baobab *Adansonia digitata*); (2) skies turning colour, from reddish to cloudy indicating that rains are near; (3) shifts in wind direction and cloud formation, heat and rumbling of distant thunder; (4) birds songs indicators. Such harbingers signal that rains are near and planting should begin.

6- 2- 4- GRAIN STORAGE:

Farmers in the local communities have developed a very successful and highly efficient and reliable storage system. Grain storage as a socio-economic institution could be seen as a long-established adaptive response to the uncertainty and fluctuations in food supply in the semi-arid savannahs. Surplus grains are stored in pits to function as food reserves for households and the local community. *Matmura* (grain store pit) can have a capacity from 10 up to 150 *Ardebs*. The common size *Matmura* has a capacity of 15 - 20 *Ardebs*. Certain types of soil are more suitable than others for the construction of a *Matmura*. The best type of soil is one of fairly close texture with good natural drainage. *Matmuras* are so dextrously dug and lined with straw and stalks that keep at bay the termites and other harmful earth worms. The grains thus stored can remain fresh up to ten years. A few unearthings are undertaken occasionally to allow for "fresh breathing", and to clean off the top layer if it turned colour. Such occasional unearthings are undertaken when quantities of grain are required by the household or by the community at any one time. The technical side of the traditional grain storage proves most efficient, reliable, and cost-effective. It relies entirely on local skills and materials, and demands no chemical inputs, traditional grain store pits provide a cheap method of storage, compared with the expensive and costly operation required by modern silos.

The shift from pastoralism towards the dominance of sedentary agricultural labour marked a long-term communal adaptation of the *Hamar* and *Dar Hamid* in response to the opportunities and constraints imposed by external forces. However, adaptation to sedentary agricultural production were to prove ill-fated in the long-run. *The Hamar* and *Dar Hamid* became more pliable to state political control, and more easily manipulable economically, their resources more easily managed and controlled by the state and other forces allied to it, than if otherwise they were still pastoralists. In a short time, the *Hamar* and *Dar Hamid* adapted their economic system to suit the demands of sedentary life. They diversified their economic activity in order to attain better security. The pursuit of diversified economic activities has become one important adaptive strategy directed to exploit a wide range of possibilities, potentialities and options that are open to participants in the local economy. Rarely do households rely on a sole activity, such as farming or animal husbandry. The norm has become to combine different economic options, involving farming, animal herding, local trading and crafts, income from labour (either local or distant), collection of forest products, including gum. The totality of sets of combinations thus offered can best be said to form a highly diversified market economy, which remains predominantly agrarian. The speed with which the *Hamar* and *Dar Hamid* responded to the forces of change has been surprisingly rapid. Ahmed describes the change:

Thus the speed with which a money economy developed in *Dar Hamar* exceeded even the dreams of the Condominium government. Expansion in the area under cultivation, the proliferation of gum tapping, the growth in trade, and the general monetisation of the economy were preludes to new social relationships ... these new social relationships find expression in the development of various forms of agricultural commodity production, of allocation and distribution of land, and of organisation of agricultural labour (Ahmed 1987: 238).

6- 3- Indigenous Production and Resource Management Systems:

This section draws the link between the survival of the village populations and the resource availability and management in the rural economy. It argues that the survival of villagers has been a condition of their ability to adapt their way of life to the available natural resources. It also is shaped by their ability to pursue production and resource management systems carefully adapted to these available resources and managed judiciously to satisfy social needs. The relationship between the management of resources and the satisfaction of local needs is thus maintained in a sustainable manner, and in effect, the relationship between the physical natural resources, and the human needs, is maintained in a balanced ecological equilibrium. The character of the production system geared primarily towards household and communal security, has precluded the development of mass famines in the locality for the most part. However, the impact of change has effectively thrown this ecological equation into disarray. The

winds of change have transformed the local production and exchange relations, reallocated labour and land resources to regimes of production directed for the market. The management and control over rural resources have shifted from local uses to external commercial demand; and from local hands to outside control of the state and the allied merchant class. It would be difficult to try to examine exhaustively the multifarious aspects of rural socio-economic change in the villages of *Dar Hamid* and *Dar Hamar*. However, some of the most important areas of change can be identified which can provide useful indicators of the impact of change in *Dar Hamid* and *Dar Hamar* in particular, but can also apply more generally to other rural areas in *Kordofan* and elsewhere. In the following pages we examine the processes of rural change in such important areas as the changes occurring in production regimes, reallocation of labour and land resources, the development of rural wage labour markets and the effects on the environment. Finally we assess the negative impact such changes have had on strategies of coping with conditions of stress.

6- 3- 1- Changes in the regimes of farm crops:

The regime of farm crops has been changed under the forces of market relations. Marketable surpluses have been sought both in traditional crops such as sesame, and in newly introduced crops such as groundnuts, while other traditional crops have been discouraged such as cotton. Moreover, the status of food crops assumed a dual role of being both food crops and cash crops at the same time. Formerly, surplus production of food grains such as *dukhn* and *dura*, was stored in *Matmuras* to serve vital food security function as reserve stocks. This is no longer the case, since under the present conditions, surplus food immediately finds its way into the market, than be stored for local food security. The whole structure of the traditional farm crops has been altered, by the introduction of new cash crops, marketable surplus production of traditional crops, discouragement of cotton production, and by the incorporation of food crops into the market as both food crops and cash crops.

Sesame, for example, was originally produced for home consumption. It was pressed in locally-made wooden mills (called *Assarah*) operated by camels to obtain oil and cake. The oil was consumed for home cooking and hair-dressing, and the cake (*um baaz*) as animal feed. With the re-organisation of the rural economies, sesame became the second important local product entering the market after gum. There are about 22 different varieties of sesame that have been locally evolved and adapted to suit the local environmental conditions. The market demand on sesame was stimulated by exports to Egypt and the beginnings of a domestic oil industry in the form of modern pressing mills and soap manufacture. However, since the early days of the colonial state, sesame has been increasingly drawn into the market as an important cash crop. Its production

has been encouraged through price incentives and the simultaneous organisation of markets. Accordingly, village cultivators have increased their production in order to achieve marketable surpluses. As a result, the cropped area increased substantially and the labour input too in order to maximise production. The area cropped with sesame increased from 28,000 *feddans* in 1912, to 385,000 in the 1950s, and to 1,976,000 in the 1970s. The impact on land use has been increased pressure on the land by intensive farming.

Groundnuts were traditionally cultivated in small quantities for home consumption as cooking oil and as food supplement, and for hair-dressing. The traditional crop had been the creeping variety of groundnuts. Commercial farming of the crop on large scale on large tracts of land did not start until about the 1940s when the American variety known as the (*Berbete*) was introduced from Nigeria where it had registered wide success in West Africa. Gradually, however, groundnuts, especially after being introduced as a cash crop on a large scale from the 1930s onwards, that the crop became the most important agricultural cash crop in the region superseding both gum and sesame. The varieties of groundnuts that have been locally adapted to suit the local environmental conditions numbered about 10 different varieties. The area cropped with groundnuts thus increased substantially, and production reached unprecedented levels; from an area of only 5 thousand *feddans* in 1912, to 141 in the 1950s and to 1987 in the 1970s. The increase in cropped area has been particularly spectacular during the 1970s and 1980s following the official policy under *Nimeiri* for an emphasis on cash crop production imposed on the Sudan by its donor countries and carried out through the World Bank and IMF. The story of groundnut cultivation as a cash crop on such a large scale in this semi-arid fragile savannah region has much to account for the problems of environmental degradation that in later years were to assume catastrophic proportions.

Food crops included *Dukhn* and several *dura* (sorghum) varieties, mainly *faterita*, *safra*, and fine grain. Millet is still the staple food in North and central *Kordofan*, as it is a crop exclusively sown in the sandy soils of this region. There are about 12 different varieties of millet which have been locally adapted to the local conditions. Because it is the main staple food amongst *Kordofan* rural communities, millet accounts for a considerable share in the local exchange trade. The major part of the crop is produced and consumed at the household level, the remainder is stored in *Matmura*; and small quantities are exchanged locally in the villages, or between the village households and pastoralists. And since local production frequently falls short of local consumption requirements, grains were usually procured from local exchanges, especially from surplus areas in the region, or from afar; e.g. from *Dar Fur* or the *Nuba* Mountains. In good years supplies can be considerably augmented from outside the region. In normal years the most productive areas were *Dar Hamid*; *Sheg El-Hafza*, *En-Nuhud*, and *Abu*

Zabad in *Dar Hamar*; and *Sungikai*, *Rahad*, and *Sherkeila* in the Eastern District. The *Homur* usually keep a store of grain at *Muglad* or *Odaiya*. further south in *Dar Dinka*, there is usually plenty of grain. And in *Dar Nuba* many of the hills like *Kadaro*, *Miri*, *Gulfan*, *Kadugli*, and *Dagu* can sometimes sell large quantities of grain. The other cereals comprising several *dura* (sorghum) varieties are mainly cultivated on the clay soils of the Southern parts of *Kordofan*, especially in the *Nuba Hills* as well as in the alluvial deposits that are found in the beds of the *Wadis* in the sandy soils of central *Kordofan*. The benign climate and the suitable soils provide ideal micro-environment for its growth and the crop gave good yields . Surplus production had traditionally constituted a significant part of local trade and exchange between farmers and herders. Under the present conditions of the commercialisation of food crops, traditional storage of food grains in *Matmurs* has been abandoned as households brought their surplus production to the market for sale to obtain cash to buy other needs. This market orientation of surplus food production has rendered local-level food exchanges untenable since all surplus production finds its way to the market for cash; which has become the single most important means through which to acquire other needs.

Cotton was another important crop. Cotton cultivation in *Kordofan* had existed for a long time prior to the colonial occupation. Cotton was formerly grown locally in considerable quantities in the villages, sown on the alluvial clay deposits. It was used locally primarily for local cloth making. It was woven on hand looms into coarse native cloth called *dammur*. This type of cotton was from a local seed variety. However, the policy of the colonial administration, as we have seen, discouraged local cotton production, and practically forbade its cultivation in central *Kordofan*. These measures effectively destroyed the local cottage industry to give way to imported cotton fabrics. The demise of the local cottage industry meant loss of employment and loss of income for many individuals and households who depended on it. It also signified a strategic loss to the local economy which turned it from self-sufficiency in cloth-making to dependency on imported textiles (for more details see Ch. 5).

The impact of change on the management and control over rural resources is far more enduring and overwhelming as far as long-term local food security is concerned. The orientation of local crop production away from self-provisioning to the dominance of the market eroded immediate household food security. And the comparative advantage to be gained from the cash earnings from the sale of the produce, offers no guarantees that such earnings will meet household basic security needs. Indeed, the evidence (as we shall see in chapter 7) confirms that cash earnings from cash crops sales are consistently loosing vis-à-vis household basic security needs, especially food.

6- 4- CHANGES IN FARM MANAGEMENT SYSTEMS

6- 4- 1- Reallocation of Labour:

The expansion of market forces from international level, to national and regional levels have rapidly transformed the rural production relations, and resulted in the

reallocation of labour and land resources to fundamentally different patterns of production relations. One important area in which changes have occurred is the management of labour allocation to the family farm. The farm management system in *Dar Hamid* and *Dar Hamar* has been and still is a family enterprise, which is a partnership between the adult members of the household, mainly the man and his wife and the grown up children. The management of the family farm unit as a partnership follows a pattern of responsibilities and rights, where the family, under the leadership of the man, have a collective responsibility to the food farm (sown mainly with millet or *dura*) to secure food for the family. Food is the property and responsibility of the man. If the harvest fails, the man has a responsibility to procure food from his own resources, either by sale of animals or cash obtained from gum sales. The woman, on the other hand, has a responsibility to grow additional crops, such as okra, beans, sweet corn and to take care of the house orchard sown with light grain (see later). After having satisfied the family requirements from these crops, women can dispense with the remainder according to their will, i.e. her property which she can sell or exchange for other needs of her desire. In woman-headed households, the woman takes both responsibilities of securing food for the family and for growing additional necessary crops, such as okra. The grown-up children participate in the family farm unit in slightly different roles for the sexes; the young males take more active part in the family food farm, and tending the animals, if they have some. The young females take less part in the food farm, but help their mother more in the other activities. Young females also spend much time at home preparing food for members working in the fields. and carrying out the daily household chores. For both, they have no rights of possession to the crops grown, although they are entitled to clothing and other basic needs. Occasionally, the family is entitled to a work party to be rendered from other members of the village community.

This division of labour in the management of the family farm, has been greatly complicated by the introduction of cash crops, and by the dramatic increase in social demands created by the influx of goods. The introduction of cash crops has entailed more division of labour, put more strains on the family labour, curtailed the labour time to be devoted to the food farm, and caused further differentiation between members of the village community. The social patterns of responsibilities and rights are altered significantly. The most significant change has occurred in the area of rights where every member of the household now has a right to grow his or her own cash crop farm. The male-head of the family has responsibilities not only towards the family food farm. He also grows cash crops (groundnuts, sesame, hepiscus) in sufficiently large quantities in

order to gain the cash necessary to satisfy the household's increasingly diversified and expensive demands, of clothes, sugar, tea, beddings, medicines, transport, schooling, and other social obligations which increasingly require the use of money to satisfy. As the responsibilities of the man have changed, so have his rights to the crops produced. The man has still the right to demand the collective participation of the family members in the family food farm. However, he has no right to demand such labour for his cash crop farm operations, which he will have to carry out either single-handedly, or can hire outside labour. The family members may help him sparingly, and at will, but not obligatorily. Consequently, the man's cash crop farm takes most of his labour time, and most of his resources (if labour is hired). Another important aspect in the labour allocation is that the man (or any member of the family or the village) is entitled to a work party in the cash crop farm, which will need to be reciprocated. The harvested cash crop from the man's farm is entirely his with which he can dispense according to his personal and family needs. But, considering that most of the family resources are in the hands of the man, especially of animals and gum gardens, the man is better placed to invest more of these resources on his own cash crops farm, thus gaining advantage over the woman, which makes intra-family income variations between man and woman.

The other members of the household each can grow his or her own cash crop farm. The woman would in most cases have a smaller cash crop farm, and may not have one at all. This can be explained by reference to two factors. The first is the limited resources the woman has anyway to afford to invest in a cash crop farm. The other is that because the cash crop farm takes most of the man's labour time, the responsibility of operating the family food farm has been shifted more and more to the woman, leaving her with little time to devote to grow a cash crop farm. Additionally, the woman has still the responsibility to produce such crops like okra and light grain in the house orchard, besides other domestic responsibilities. The most important change has occurred in the allocation of labour of the grown-up children (males and females) in the household, where under the forces of cash cropping, each works his or her own farm, entirely independently of the family, and primarily for their own personal use and needs. The significance of the change is that it has caused important dislocations in two directions as far as the family food security is concerned. On the one hand, it deprived the family food farm from a significant share of labour of the subordinate grown-up members. On the other hand, it directed the proceeds accruing from the value of the cash crops more towards increased consumption of needs and less on food; which effectively means that most of the family labour has now being directed to more consumption than to the household food security. Increasingly, however, family farms are satisfying their consumption needs with income derived from increased cash cropping and labour migration, as well as from livestock sales and commercial charcoal production.

6- 4- 2- *Reallocation of Land:*

Under the force of the state policies, land is increasingly moving from communal to private ownership. Indeed, official statements as early as 1910 confirmed that land ownership is being systematically moving from communal to private ownership. One official stated that:

It appears to me that the transitory stage between communal and individual ownership is being passed through. It is possible that the ownership of land is tending to pass from communal to individual ... It is true that the incubus of landlordism is felt. So-called landowners take every tenth head of grain from Sudanese blacks who are simple enough to pay (cited in Ahmed 1987:).

In early 1930, the government ruled that priority for cultivation be given to land where *hashab* trees ceased to be productive. This is considered to be the most economically and ecologically sound method of agricultural practice to integrate gum tapping as part of the agricultural cycle to ensure the survival of the *hashab* trees.

The state development policies have the major impact on the utilisation and allocation of land, and competition on land has become more pronounced between food crops and cash crops, on the one hand, and between farmers and herders on the other. Although the legal status of land in the rural areas of Sudan stipulates that all land belongs to the state (Simpson 1991; Barbour 1961; Awad (undated); Bolton 1948) The real powers are vested in the hands of the village *Sheikhs* who are lawfully authorised as guardians and delegates acting on behalf of the government for control over and allocation of the land and range resources. There is no formal registration of farm lands by individual farmers, although individual persons have the absolute rights to the lands granted to them by the *Sheikh*; provided that they keep it in use, and can dispense with it accordingly.

The policies of settlement around water points, and the concomitant land reforms, have also created problems. These policies have practically divided the local communities into two competing groups following differing production practices; namely farming and herding. Competition and problems between sedentary farmers and pastoralists have become increasingly frequent, especially worsened in the past years by the on-going war in the *Nuba* Mountains of Southern *Kordofan* which provided excellent Summer grazing for pastoralists from the North who used to exploit the abundant grazing resources here. The war in the South has drastically curtailed the areas of pastoral movements, forced these movements to be confined to the limited lands of the central zone of *Kordofan*, thus intensifying competition and problems between farmers and herders. Another important dimension to the reallocation of land, concerns the complications and constraints imposed on the local production relations by the development of large-scale commercial farming in Southern *Kordofan*. This

development, has affected the people in *Dar Hamid* and *Dar Hamar* in at least two respects. On the one hand, it has created problems of passage to the pastoral groups at the onset of the dry season where shortage of pasture and water in the North force them to migrate South passing through the mechanised farms on their way to *Bahr el Arab*. On the other hand, it has led to pressures and tensions between pastoralists and cultivators over land resources.

Farmers cultivate the land around their villages. Each individual or household has a plot(s) of land as their farm(s). They do not apply fertilisers, but the animal dung scattered in the farm lands during animals' grazing in the after harvest season, serves as organic manure to enhance soil fertility. In addition to the organic manuring from animals dung, another mechanism has been used with a view of maintaining soil fertility, i.e. fallow-cycling. Local farmers have long learnt the advantages of fallowing where the cropped land is cultivated for a number of years, then rested for a couple of years and allowed to regenerate its lost vitality. In the past, cropping period was shorter and fallowing longer. Elderly local informants told that they used to crop the farm land (*bilad*) for between 5-7 consecutive years, and then rested it for 15 years or more, and allowed until the land fully regenerated and restored its vitality. Today, they regret that the reverse is true; where cropping periods are getting longer, between 5-6 years, and fallowing intervals shorter of 4- 6 years. The effects of this change has been the replacement of the regenerative fertility-enhancing longer fallow cycles by a more degenerating fertility exhausting intensive cultivation of short fallow cycles. Understandably, the development of natural resources in *Kordofan* has systematically followed the trend of horizontal expansion into more and more marginal fragile lands, with the inevitable consequences of recurrent environmental disasters in recent decades

6- 5- Impact of Change:

6- 5- 1- Effects on the Environment:

In the period before the *Hamar* and *Dar Hamid* permanently settled towards the turn of the century, the dispersion of humans and animals over a wide area and the resultant low population densities relieved the pressure on the land. However, large human settlements around water points initiated by central governments since the turn of the century, and the consequent concentration of humans and animals in limited areas, resulted in overgrazing and overcultivation and in effect accelerated the processes of environmental degradation. The state policies for socio-economic transformation have induced the rural village farmers to expand production into marginal lands and more fragile ecologies; led to insensitive use and exploitation of the land which contributed to environmental degradation.

6- 5- 1- i- The Impact on the Hashab "Acacia Senegal" Forests:

A most grave effect has been on the *hashab* "Acacia senegal" which led to a critically serious deforestation of the *hashab* forests. The urgency of the problem stems not only for considerations of the economic utility of the *hashab* as the gum tree, but most importantly for its vital ecological value. This role is made possible because the tree keeps intact the land surface on which it grows, and protects it from wind-blown erosion. It has the added advantage of being a nitrogen-fixing tree, therefore, has the capacity to aid the growth of supportive land-surface grass which can form protective grass cover against wind-blown erosion and desertification. The *Hashab* tree is the single most important and valuable tree in the region for considerations of ecological balance and long-term environmental sustainability, urgently calls for protection and conservation..

Until about the 1950s, the *hashab* bush formed dense thickets almost impenetrable at places. Every individual adult male owns at least one garden of *hashab*. Strangers who happened to settle with the village people would also be allocated a garden as the social norms obligated, as a means of self-provisioning. The average *hashab* garden until then ranged approximately between 20000 -25000 trees. Larger gardens could number between 30 - 50 thousands. This needed about 15 to 20 strong men to tap over a period of a month, each man (locally referred to by a figurative term; axe), each axe tapping between 70 to 100 trees a day. At the time of the study, about 90% of the *hashab* gardens have already fallen. Now the average *Hashab* garden is about 3000 trees, and a small number of work force of about 3 to 4 men (axes) would tap the garden, each tapping about 60 trees a day for 10 to 15 days' work. In the past yields were high, averaging about two sackfuls of gum per collection, collected on a fortnightly intervals for the whole harvest. One garden would yield between 7 - 8 *kantars* per collection, and between 25-30 *kantars* for the whole harvest. At present, one collection yields only about 30 pounds. Collection time intervals are shortened to 10 days between. The best time for tapping is October, if there is no locusts which are the constant nightmare of the gum collectors, and if the trees are not green. Greenness of the leaves indicates the tree is not yet ripe for tapping. When the trees are tapped about the end of October, they take about a month before they start producing gum. Collection starts in December. The first collection is usually small in quantity, but rapidly picks up in the second and third collections, only to start falling again from the 5th and 6th collections. Harvest time continues from December till about May or June, only to be stopped by the coming of the rains. At this time the gardens are at their lowest yield, and many farmers consider them not worthy the trouble, are abandoned as public property for small boys to make a little cash. Animals are also let to browse on the trees.

As a leguminous plant, "fixing" nitrogen from the air into the soil as fertiliser, the gum Arabic tree is a vital part of a carefully balanced rotation system. The ageing trees on uncultivated land are felled to clear the land for the cultivation of crops, mainly millet and sorghum which will be grown for about five to six years, after which time the soil fertility starts to decline. Then the land is rested, and the *hashab* trees are allowed to grow for fifteen to sixteen years during which period the *hashab* nitrogenous fixing restores lost soil fertility and regenerates the land, while simultaneously gum is collected. Young shoots are allowed to grow in the newly cleared land for three to four years to reach maturity, and when they age and their yields decline will be felled to clear the land for cultivation and a new cycle begins.

Gum production was greatly encouraged by the state through price incentives and the regulation of local markets. Indeed, the whole of the *Kordofan* rural economy in the central belt was completely re-organised around the gum production and trade. The various formerly pastoral groups such as the *Hamar* and *Dar Hamid* were encouraged to settle in villages throughout the Acacia belt as gum collectors. Prices offered to the gum were improved as a further incentive to encourage production. Sudan controls most of the world supply used by the chemical, brewing, textile and food industries, and *Kordofan* contributes about 80% of Sudan's total output of gum. Unfortunately, the government is doing its inadvertent best to accelerate the already enormous deforestation of a plant that must be a part of any attempt to limit desertification (Cater 1986). The enormous deforestation of the *hashab*, which formed the backbone of the *Hamar* (and to a lesser extent *Dar Hamid*) economy, immediately results in loss of incomes for the majority of households, and translates into loss of "food exchange entitlement" as a consequence (Sen 1980).

6- 5- 2- The Development of Rural Wage Labour Markets:

Under the pressures of change, the rural populations naturally responded by exploiting new ways and means of livelihoods for income generation. Such responses took new forms of adaptations, hitherto little known in the rural economy. Migration, commoditisation of labour and the development of rural wage labour markets, collection of forest products, and trading activities are some of the new forms of adaptations. Commoditisation of labour has been both a response to and a consequence of the changed rural socio-economic relations. The village populations have become increasingly dependent on hiring their labour power in increasing numbers in a quest for cash earnings. As a principal means of production, labour is no longer a matter of individual choice, but has become a commodity subject to the up and down swings of the labour market. This qualitative shift in the utilisation of labour from the producer's own production to hire their labour for cash followed the changed rural social relations

of production from one of predominantly self-provisioning to one of market exchange. The differentials in access to the market and in income disparities have created differentiated social relations in the village economy in which some people (like village traders) have become relatively rich while others become poorer. The situation in the context of depleted natural resources and increasing social demands left the poorer village members no choice but to hire their own labour power to the more financially able of the village members. Commoditisation of labour, therefore, came as a rational choice as a form of adaptation to the pressures and demands brought to bear on poorer village households. But it also signalled a dangerous shift in the orientation of labour from local decision and control for purposes of producing for home consumption to the wage market for purposes of commercial production. The danger resides in the fact that, as a principal means of production, rural labour is being alienated from the legitimate owners for household security to producing for the market. The alienation of rural labour, adds to the other forms of alienation of resources, namely that of natural rural resources. It is not surprising that the degree of commoditisation of labour, and the extent of expansion of the rural wage labour markets is reflected in the percentage share which wage labour contributes to the incomes of many village households (as will be shown in the next chapter). Wage labour now contributes between 25% to 100% of the incomes of many households, depending on the degree of poverty of the household.

Table 7 Source and share of income in 2 types of household

<i>Source of Income</i>	High Income	Low Income V
	%	%
<i>1- agriculture</i>	10	25
<i>2- livestock</i>	30	-
<i>3- gum Arabic</i>	10	-
<i>4- wage labour</i>	-	50
<i>5- trade</i>	10	-
<i>6- salaried employment</i>	20	-
<i>7- handicrafts</i>	-	-
<i>8- collected products</i>	10	20-5
<i>9- remittances and transfers</i>	10	-

Field-Work Data 1993.

The development of wage labour markets in the village economy has other serious implications as far as food security is concerned. In the traditional subsistence economy, the allocation of labour serves a vital food security function, in that it is distributed in such a way that each member of the village community is guaranteed of labour in forms of help and work parties to ensure that (s)he gets the minimum security of food production. Especially weaker members of the village community who, for illness, age or other ailments are short of necessary family labour, get the most help. This, of course,

demands no economic edge or leverage, but follows the ethics of the egalitarian economy. These forms of labour allocations for communal food security are now seriously weakened under the commoditisation of labour. And in as much as the allocation of hired labour follows the dictates of economic power, weaker members of the village community, and those households short of family labour who do not have the economic means to hire needed labour, would certainly be more food insecure and most vulnerable to conditions of stress.

In the last four decades, wage labour markets have become increasingly prevalent in the villages in *Dar Hamid* and *Dar Hamar* and dominant over traditional labour institutions such as work parties, family labour and other forms of patron-client relationships. It is instructive to examine how labour markets have developed in *Dar Hamid* and *Dar Hamar*, and how their development has affected local production relations, allocation and control over rural resources, how this contributed to accentuate rural/village differentiation, and how ultimately these developments have affected the food security of certain households in ways that render poorer (labouring) households more vulnerable to natural shocks.

Historically, no forms of hired labour existed in the local economy in which one party exploits the labour power of another party for maximisation of benefit. The only remote possible exception to this rule was probably the labour of shepherds hired by herd owners to tend the herd(s), and conducted through a well-established tradition of the "shepherding contract" (see Chapter 3). Even here, it is hardly possible to designate this type of labour as wage labour, since it involved no fixed rates nor paid in money. It is by all considerations a unique type of labour which gives generous terms of employment. Indeed, many of the contracted shepherds can accumulate enough animals that in a few years they can hire shepherds in their own capacity. This represented the only form of hired labour that had existed in this area for centuries, essentially because the *Hamar* and *Dar Hamid*, like the other communities in North *Kordofan* were pursuing a pastoral mode of economic practice, and took to sedentary cultivation only since the turn of the century which marked the beginnings of agricultural labour production and the subsequent development of rural wage labour markets. Rural/village labour markets did not develop automatically or instantaneously since the *Hamar* and *Dar Hamid* began to settle down as sedentary cultivators in villages in their present homelands in the central zone of *Kordofan*. The process has since been rather incipient, and followed broader and more complex patterns of social relations, conflicts, and trends towards rural differentiation in which certain groups were gaining in wealth (to form the employing party) while others were losing (to form the working party).

Since the *Hamar* and *Dar Hamid* settled and became sedentary cultivators, and especially since the introduction of the cash crop production, mobilisation of the village

labour was no longer confined to meet basic subsistence needs, but surplus production was sought in its own right in order to maximise individual economic returns. Consequently, competition for labour for maximisation of economic rewards was set in motion. Competition for labour, however, entailed mobilisation of labour in various forms; work parties, communal labour (as for example the village community rendering labour to the farm of the village *Sheikh*). family labour, patronage. Competition for labour through these various forms of labour mobilisation has been more dramatically complicated by the recent development of the rural wage labour markets. The relationship between those earlier forms of labour mobilisation and the wage labour markets is complex. Some definitive remarks can be made; first that the two forms now co-exist side by side; but the wage labour markets are getting more prevalent and dominant, while the earlier non-market institutions (such as work parties) are progressively receding.

The domains in which rural labour engages range from agricultural farm operations (clearing, sowing, weeding (first and second), harvesting and threshing; gum tapping and collection, building, and building material, gathering fodder, and domestic work. Labour transactions for agricultural farm activities vary from one operation to the other. The cleaning operations engage relatively less hired wage labour since many of the households- (the male-head) of the family and the adult males- clean their farm lands. Where hired labour is required this is transacted on a "piece" basis; i.e. wage is agreed on on cleaning a fixed piece of land, normally measured in *makhammas* (1 *makhammas* = 1.7 acres; appr. = 1 hectare). Sowing, on the other hand,. engages more hired labour, owing to the short planting season for the different crops all at the same time, hence pressure is intense and competition high; and the labour is transacted on a two-shift half-daily basis; one longer morning shift from morning to noon, and a shorter afternoon shift from afternoon to sunset. Wage rates are higher for the morning shift, almost double those of the afternoon one. In the sowing operations, for the various crops, especially groundnuts and *dukhn*, the employers of labour hire as many people as possible. This is meant for the employer to plant his/her crops as quickly as possible and at the most opportune time for optimal exploitation of rainwater and moisture. Timely planting can to a large extent determine the success or otherwise of the harvest. Weeding is carried out in two operations, first weeding (begins shortly after the crop tendrils are out competing with grass). The operation is intended to rid the crop from the competition from weeds and grasses over nutrients. A second weeding is needed at a later stage when another sprout of weeds and grasses compete with the crop. This is less demanding than first weeding. First weeding is naturally very strenuous, demanding and exacting. It is also critical for the success of the harvest. Therefore it engages the most hired labour and gets the highest wage rates. Second weeding is less demanding and

gets less wage rates. Weeding is transacted on a "task" basis; an agreed rate for a fixed piece of land/labour. First weeding comes at a critical time in the farming season when the different crops require weeding at the same time. Therefore competition for labour is very high, and at peak times hired labour shortages occur frequently, because either people are engaged in their own farms, or the available labour is being attracted to some better paying group. Consequently, wage rates for weeding operations increase in the peak of the weeding season due to pressure and competition. The wage rates can indeed be so tempting for poorer households that some neglect their own farms in pursuit of better and luring wages. This is one of the reasons why some poor households get poorer and more food-insecure as a consequence of the conditions of the wage labour market.

Table 8 Farm operations, season and bases of payment in rural wage labour.

OPERATION	PEAK SEASON	BASIS OF WAGE
cleaning	May - June	piece, or task basis
sowing	June - early July	time basis
1st weeding	July	task basis
2nd weeding	August	task basis
harvesting	December	unit (/no. sacks) cash crops
threshing	(extended time)	task basis

Source: Field-work data 1993.

Labour allocated to harvesting differs between food crops and cash crops, engaging traditional labour and wage labour respectively. Harvesting of *dukhn* and *dura* is still carried through traditional labour institutions; mostly through women work parties, and short-term contracts for a fixed share in the crop. It involves no money payments. Cash crops, on the other hand, especially groundnuts, are mostly harvested through wage labour. The wage is either on a time basis (*dahawa*, or day time), or on a task basis (a piece of land, or a bulk of the crop; number of sacks). Threshing of the grains has traditionally been worked by work parties until recently. Wage labour is increasingly employed, but work parties and extended-family labour are important in threshing operations.

Table 9 Division of rural wage labour between food and cash crops.

OPERATION	FOOD CROPS			CASH CROPS		
	market	combn.	non-mrkt	market	combn.	non-mrkt
cleaning		*		*		
sowing		*		*		
1st weeding	*			*		
2nd weeding		*		*		
harvesting			*	*		
threshing		*		*		

Source: Field-work data 1993.

From table (9), it is obvious that the introduction of cash crops to the rural economy is the single most important factor in the development of the wage labour markets in the villages. This is illustrated by the fact that all the farming operations involved in cash crop production require additional labour which can only be mobilised through the wage labour market.

Farm labour is not the only form of labour that has been increasingly commoditised in the village labour relations. Other activities in which wage labour has become increasingly dominant include building houses and fences which were previously all conducted through work parties. Wage labour has also become more important in Gum tapping. Wages for domestic work, especially for women, such as cleaning are also found in the villages. The clear evidence to emerge from these instances of the development of the wage labour markets in the villages is that there is clearly a process of social differentiation in which certain individuals and households are identified as "working class" ready to sell their labour, while others are "wealthy" who can afford to pay the costs of hired labour. We need to say why some households start better off than others, and what makes some wealthier and others poorer. One factor is that the weakening of many of the traditional arrangements for labour mobilisation which were evolved centrally around the guaranteeing of security to all members left some members who have little labour or insufficient resources to deploy, left them behind. Additionally, the increasing importance of trading in the village economy has given some members, who have a little saving to start trade, gave them easy access to credit and other facilities from towns merchants with whom they have come in partnership or become clients. Little savings and access to limited credit and other trading facilities determined a households ability to cultivate their farm without having to resort to sell their labour. Households with little food or animals, and without access to credit, and diminishing resource-sharing arrangements with other households, have to earn income from selling their labour in the market. The income they expect to earn from selling their labour determines how much they cultivate, rather than the other way round (Kevane 1994).

The relationship between the wage labour markets and traditional labour institutions is a complex phenomenon which calls for more investigation since it lends itself as an interesting case for the study of rural change. In all traditional labour institutions; i.e. work parties, communal labour, family labour, besides the utility function, there is an equally, or more important social functions for the mobilisation of labour; to reinforce solidarity, prestige and group membership. The relationship between the utility role and the social role of labour are mutually reinforcing. Wage labour, on the other hand, serves exclusive utility roles; for maximisation of economic returns from the

exploitation of the labour power of poorer members. The social role of labour is absent. Wage labour negates the social function found in traditional labour institutions; i.e. while the latter reinforces solidarity and membership, the former works in the opposite direction; i.e. reinforces individual wealth, power and social differentiation. While the one diffuses differences, the other accentuates them.

Another difference between the two labour institutions pertains to their respective roles for household security. The utility role of traditional labour institutions is to ensure minimum security for the household. And since this form of labour is reciprocal in many respects (work parties), its role is to ensure security to all members. Traditional labour institutions serve social functions (solidarity) and utility functions (security); and the two functions are mutually reinforcing. Wage labour, on the other hand, negates solidarity, and while it may considerably contribute to the security of certain households (those hiring labour), it also creates conditions of insecurity for the majority of poorer households (those selling labour). The relative good security of some of the wealthier village households, and the insecurity of poorer ones, can be a direct consequence of the divergence of interests involved in the reallocation of labour in the wage markets. These institutional changes and the resulting variations in the village food security patterns explain why even in the same village some households are able to escape famine virtually unscathed, while others suffer to the extent of starvation.

6- 5- 3- Internal Wage Labour Markets:

Migration for work from *Dar Hamid* and *Dar Hamar* in the past was confined to occasional group movements from one locality to another induced by conditions of stress, and was thus mainly directed for food security. *Dar Hamid* and *Dar Hamar* communities did not know the wage institutions until about the 1920s or 1930s when they started to migrate for work in the main production areas in central Sudan, especially to the *Gezira Cotton Schemes*, and to *Gedarif* area to hire their labour power in cotton picking or in the activities of commercial agricultural farming in the *Gedarif* commercial *dura* farms. This was a direct consequence of the state planning policies which -since the early days of the *Gezira Scheme* - stipulated that seasonal labour requirements for cotton picking in the Scheme should come from Western Sudan, following the socio-economic restructuring of the Sudanese economy which assigned to the Western provinces the role of supplying cheap labour, both for the immediate term and as potential labour reserves required for the future developments of modern capitalist agriculture in central Sudan (see previous chapter). Consequently, seasonal migrant workers from rural *Kordofan* participated significantly in the labour force required in the cotton Schemes. This migration from the villages of *Kordofan* to *Mukuar* was greatly facilitated by the opening of the bridge at *Kosti* and the extension of the

railway to *El-Obeid* in 1912. Wage workers are particularly drawn from Eastern *Kordofan* districts, including *Dar Hamid*, in view of their close proximity to these areas of mechanised and commercial schemes in *Gezira* and the Nile. An organised system of seasonal labour mobilisation has been permanently instituted. Labour recruitment teams of brokers continue in the contemporary period to inundate districts of *Kordofan*, including *Dar Hamid*, in convoys of trucks and lorries in about November and December; and a whole-scale mobilisation of rural labour takes place every year, involving individuals, families and entire village communities. They are loaded and packed on trucks and lorries to the schemes, to spend the Winter and early Summer months picking cotton and other menial jobs. The return time for the migrants is shortly before the start of the rainy season, so that they can till their own plots with their families. The whole process is not dissimilar to the summary forced labour for the colonial plantation schemes in many parts of Africa which characterised the colonial period (Rotberg 1983; Brett 1973; Iliffe 1987, 1983:). The seasonal agricultural labourers receive very low, barely sufficient to support them (for more details see discussion on page 158). Wage labour on the schemes, offered no salvage to the direness of the seasonal migrant workers from *Kordofan*. Alternatively, many young males are attracted to the towns and main urban centres looking for wage employment. But these migrants to the urban wage labour markets have little skills to help them in the towns, and have no options but to engage in poor-paying manual work such as building, brick-laying, and other petty jobs such as waiters, porters etc. Such migrants to the wage labour in towns ultimately face a dilemma: they become uprooted from their rural communal bases, disenchanted with farm labour in the villages, and have no prospects of success or place in the towns. In the end, they either return to the villages after having spent many "empty" years in the towns, or else they often end up joining the slum dwellers in the shanty towns living on the fringes of the urban milieaux.

Another wage labour market has developed since the 1950s following the introduction of mechanised farming to *Habila* in the clay soils of Southern *Kordofan*. An important effect of the development of the mechanised farming schemes in *Kordofan* is the attraction of labour from the rural areas, which greatly contributed to the development of the wage labour market where increasing numbers of the village populations go to *Habila* for cash or food grains. Workers who are attracted to this wage labour market come from poor households, and in many instances involve whole families (e.g. from *Dar Hamid* and *Dar Hamar*). There are two systems of payment in *Habila* commercial mechanised farms: cash wages and in kind (paid in *dura*). Cash wages are generally low, and the majority of workers, who are impelled primarily by the need to secure their household food requirements, prefer to receive their wages in kind of the crop; calculated in number of sacks. The *dura* they receive for their labour can

often provide good security for such poorer households. The timing of agricultural activities in the traditional and modern sectors is different. The following table shows the different times which is a factor in the development of the seasonal wage labour market.

Table 10 Timing of agricultural activities for cotton and sorghum in the traditional and modern sectors

Activity	Traditional sector		Modern sector	
	Cotton	Sorghum	Cotton	Sorghum
Planting	May/June	May/June	July	July
1st weeding	June	Early June	July	July
2nd weeding	June/July	Late June	Early August	July/August
3rd weeding	End July	July		
4th weeding	August			
Harvesting/picking	January	Dec./Jan.	Jan./Feb.	January

Source: from Haaland 1991: 233.

The differences in farm activities allow for a certain amount of symbiosis where family farm members work as seasonal agricultural labourers in the mechanised farms for short periods between the peaks of labour demands on their own farms. In spite of this rather harmonious picture, the exploitation of the clay areas through large-scale farming may prevent the development of intermediate technologies which would make it economic for family farms to establish medium-sized enterprises on the clay soils, thus reducing pressure in the over-exploited, more densely populated middle belt. But this would depend on the Government's ability and will to tackle a multitude of difficult politico-administrative problems. These are very difficult decisions to make by a Sudanese Government faced with the formidable problem of not alienating important sections of powerful political support bases of the economic and agrarian urban elites (Haaland 1991: 233-4)

The national labour market in the other sectors of the Sudanese economy offers little prospects for employment for labourers coming from rural *Kordofan*. This can be explained in the light of three factors: (1) that such migrant labourers from *Kordofan* are mostly unskilled workers with little experience of work outside farming and animal husbandry; (2) the employment opportunities that can be found in the other sectors of the national economy are manned by people from the centre of Sudan who are favoured in jobs, as relatives or acquaintances of executive personnel, and (3) the capacity of these sectors to absorb labour is low any way. This is reflected in the very low percentage share these sectors contribute to employment compared to agriculture which absorbs over 70% of the Sudan's work force.

The evidence of a growing regional and national wage labour markets suggests the existence of huge regional disparities in the distribution of incomes, and nationally in the distribution of wealth and opportunities, and growing social differentiation and

regional polarisation can be inevitable. Within *Kordofan*, indeed inside the villages, merchants and clients have been enabled by the state to own commercial mechanised farms, while the majority of poor households provide the necessary labour power to work the village farms and the commercial farms for wealthy merchants. The relationship between employers and workers suggests widening income disparities within the villages and inside the region. On the national level, the state has unfailingly supported the modern agricultural sector, channelled the development funds to this sector in central Sudan, while it consistently deprived the traditional farm sector in *Kordofan* from such funds, essentially as a political tactic to serve as push factor to drive workers from their villages and force them into the wage labour market in central Sudan. This dual policy of concentration and deprivation can explain the dualism in development which characterised unequal development planning in Sudan, and which ultimately created the huge regional inequalities in the distribution of wealth and opportunities, creating a widening regional gap which threatens the country's very existence. It is in this context of regional polarity, the policies of concentration and deprivation that we can understand and explain the exploitation and impoverisation of the rural village populations in *Dar Hamid* and *Dar Hamar*, and their ultimate vulnerability to the conditions of famines. In the final analysis, cash earnings from wage labour markets inside *Kordofan*, and in central Sudan offer no relief to the stresses of migrants from rural *Dar Hamid* and *Dar Hamar*. And the opportunities of employment in the other sectors of the Sudanese economy are very limited, confined to central Sudan and controlled by certain groups. People turned their attention to the lucrative and expanding labour market in the rich Arab States; and external migration to the Arab World has evolved into one of the most important forms of wage labour since the early 1970s.

6- 5- 3-- External Wage Labour Markets:

From the early 1970s, external migration from rural *Kordofan* to the Arab Gulf States has been on steady increase, and in recent years, especially in the aftermath of the recent droughts, has assumed the proportions of a large-scale exodus, reflecting the scale of gravity of the conditions in the rural countryside of *Kordofan*. No regional statistics are available to quantify the volume of external migration from *Kordofan* to the Arab states, but the general trends of this migration can be understood from the scale of external migration from Sudan as a whole. The pattern of this migration from *Dar Hamid* and *Dar Hamar* shows a distinct trend in the volume and direction of this migration. Throughout the 1970s and until the mid-1980s, the destination of *Kordofan* migrants from *Dar Hamid* and *Dar Hamar* has been mainly to the Arab Gulf States; e.g. Saudi Arabia, Kuwait, The United Arab Emirates and Iraq. Whereas since the late 1980s to the

present, increasing numbers of *Kordofan* migrants have been drawn to Libya. In those earlier years migrants from *Dar Hamid* and *Dar Hamar* have been attracted to the Middle Eastern labour markets, under the pressures of their internal problems, and in response to the opportunities offered by the expanding labour market created by the Middle Eastern oil industry in the boom years of the 1970s and early 1980s. The wage earnings such migrants receive are sufficiently rewarding, and the remittances of money transfers which they make to their families have been one of the major lifelines in supporting households during these years. However, the crash of the oil boom, coupled with the saturation of the Gulf labour markets with migrant Asian labour made wages to collapse even further with a corresponding contraction of job opportunities. These developments in the Gulf labour markets, forced *Kordofan* rural migrants to seek opportunities elsewhere. Thus, still responding to the pressures of their internal conditions, increasing numbers directed their attention to Libya's labour market, which, though less enterprising than the Gulf, yet is far better than staying in Sudan, eking a precarious livelihood out from exhausted lands and with no prospects of employment in the national labour market. Here, too, remittances and transfers play a vital life-supporting role for families and households in the villages behind.

It is evident that external migration by the *Hamar* and *Dar Hamid* to the rich Arab States has been in response to pressures bearing on them, political, economic and environmental pressures all acting in concert. It also reflects the structural weakness of the internal Sudanese labour market, which offered the migrant labourers no security, either in towns or in the modern mechanised capitalist agricultural sector. The resilience of the rural populations, their adaptability for survival, however, has not stopped short in the face of formidable adversities and challenges surrounding their local conditions, the weakness of the national labour market, or the impotence and incapacity of the Sudanese state to provide opportunities of employment or other means of security. But they sought livelihood in the opportunities offered in the regional labour markets of the oil industry in the Arab world. Indeed, the scale and significance of the participation of workers from rural *Kordofan* to the Middle Eastern labour markets can be appreciated from the scale of the rural exodus. The service which these migrants render to the lucrative international oil industry, to the Arab States, and to the international community as a whole can be unmistakable.. In return, this migration offers better chances of security for the many thousands families and households who continue to receive remittances and transfers from their migrant members in the Diaspora. In 1993, in the village of *Omdofais*, there were 21 migrants in Libya, 20 in Saudi Arabia, and 23 returnees who had spent some years working abroad in the oil Arab states. The return time for these migrants can vary considerably from one year to ten or more. Migrants on their return invest their money in livestock and trading, since there are few investment

opportunities open in the rural economy. Many of the migrants who are exclusively males, come and go routinely in a fashion that has become an established feature of life in rural *Kordofan* and in Sudan generally (for details, see next chapter).

However, it has become increasingly evident the social problems that the migration to external markets creates in village life; such problems as the acceleration of social differentiation. The migrants to the Arab States form a distinct social group in the village social set-up. Migrants tend to stay for longer periods of time, and other have good jobs, such that the amounts of money they transfer to their families are large enough by village standards. Accordingly, the standard of living of households with migrant members to the Arab world is higher than ordinary village households, in which the egalitarian village community is being differentiated in terms of income and standard of living (see chapter 7). It has been related that a girl in the village school whose father works abroad, looks down on her school mates and insulted one of them for her ragged clothes. It is true that many of the village households have at least one migrant member to the Arab labour markets. And those households who do not have one, constitute some of the very poor households in the village

6- 6- The Development of Rural Trade

6- 6- 1- Trade, traders and rural social differentiation:

Trading represents another form of adaptation to the forces of change, as an avenue of income generation. Some individuals engage in petty trade, buying small quantities of goods from town merchants, and selling these to the village populations, making small profits from their trade. Over the years, such individuals are able to accumulate sufficient capital to enable them widen their trading activities, buying more or less of the village agricultural produce as their capital outlays can permit. In due course, they grow into a distinct social group of village traders. They can extend some limited credit to the village people, thereby wielding important social and economic power in the village politics. Accordingly, the standard of living for merchant households is higher than ordinary households, and the village community is being somehow differentiated in terms of income and standard of living. Indeed, a process of nascent social differentiation is emerging in the village economy. This is evident in the contemporary village social relationships, and captured in more concrete terms in people's expressions when the ordinary village people relate how the rich no longer heed to the poor, implying a social rift between rich and poor, and a rupture to old village life of mutual help and support. Such verbal expressions about social differentiation in fact lack true class consciousness.

Traders were itinerant who came from *Omdurman* and *el-Dueim* in Central Sudan. Their stock of trade included such items as sugar, tea, perfumes, *Damour*, and spices.

They bought from the village people Gum Arabic, sesame, and a little groundnuts. Groundnuts were previously grown solely as a food crop for household consumption as part of the diet and for women oiling, but not for the market. Groundnuts were not grown as a cash crop for the market until about 1940s. The itinerant traders who came from Central Sudan, get their stock of trade from wholesale white merchants (*Khawajat*) based in the main cities of *Omdurman*, *Khartoum* and *El-Obeid*. Their means of transport were camels and donkeys hired from the local people, and frequently they travelled on foot carrying their bundles of trade from village to village. They would usually stay between two to three days in the village and then move on to the next. Besides gum, which was the most important item of trade, the itinerant (*Jellaba*) traders also bought from the villages locally made wooden bowels, wooden flails, and saddles. Large wooden bowels (*Gudaha*) were common household utensils in use among the rural populations until more recently to serve food. These have now been largely superseded by imported manufactured items; first of china, then metal and later of plastic-based substitutes. Another type of this local wood craft was a type of oblong bowl-shaped dish used for watering animals. The itinerant traders (*Gellabah*, the word literally means itinerant traders) bought these wooden utensils from local craftsmen in bulk (of 20s) which they then carried on camel back to market elsewhere where there was need for them in other areas.

These items were common household utensils which were used for various purposes from serving food and water to serving guests. Other local industries included beds locally made from slender branches of certain shrubs, woven in close-knit grids to make flat wooden beds known as (*Sarrir Saddad*). Rope making was a thriving local industry too. Ropes were manufactured from the fibrous bark of the *Tabaldi* trees (Baobab), and were used as the preferred strong ropes in bed nettings and animal roping.

The transformation of the rural economies and the concomitant expansion of markets have changed the patterns of production and consumption of the villages in fundamental ways. The village populations found in their hands an increasing amount of money from the sales of their cash crops with which they acquired a wide array of foreign-made consumer goods, made readily available in the markets. Thus, the whole scale of their material needs and demands has been thrown upwards by the increased circulation of liquid money and the simultaneous availability of consumer goods. The expansion of trade vastly increased consumable goods in volume and variety, and profoundly altered consumption patterns. Thus, fabrics of all sorts and makes, items such as soaps, perfumes, shoes, beverages, sugar, coffee and tea, metalwork, cigarettes, tobacco became common consumption items in village shops. Indeed, the variety and diversity of goods and items became a plethora too vast to circumscribe. The following

table gives a general picture of the state of production and trade in *Kordofan* in the height of the colonial period:

Table 11 Items of trade in *Kordofan* in 1910s

ITEM	Average 1932/6	1937	1938
Gum	13,427	12,967	14,644
Grain	18,214	20,629	17,599
Groundnuts	2,155	3,017	3,588
Sesame	4,209	8,752	7,855
Melon seed	5,463	5,264	6,215
Cotton seed-oil	=	=	206
Cotton (ginned)	=	3,865	4,580
Hides and skins	=	500	465
Semn (clarified butter)	=	1,000	1,000
Sesame oil	=	1,500	3,500

Source: March 1948: 828.

The development of trade brought increased circulation of money. Since the turn of the century, there was a steady and increasing circulation of English gold money in the towns of *Kordofan*. Egyptian silver and notes were also readily accepted in the villages in the central districts. local transactions which were formerly performed through various media including barter exchanges, cloth, silver, salt, and the like, were now abandoned and replaced by the use of money. The involvement of the local populations in the market brought them into contact with the towns-people where they were more and more exposed to the consumer culture. The array of consumer goods that have become available in the markets lured the local people to acquire them; thus developed new tastes which contributed to an evolving consumer culture. Ultimately, money as a means of acquiring new products and of fulfilling social needs, became the symbol of the new form of power and wealth in the rural economy. The on-going processes of rural transformation took not only the economic forms of production and exchange, but also involved deep-reaching cultural changes affecting the whole range of cultural values, communal traditions and customs, and social-economic relations.

6- 7- THE DEMISE OF LOCAL MANUFACTURES AND CRAFTS::

A plethora of indigenously developed crafts and manufactures existed in the local economy to add to the diversity of socio-economic activity. A few examples of these include crafts such as pottery; an exclusive privilege of women. Other women crafts included tanning, wool-knitting, basket-weaving, mats-making, leather works, all of which afford significant contribution towards the female well-being and economic independence. There was also local carpentry, saddle-making and other wood crafts, which is a domain exclusive to men in view of the heavy manual labour demand

required for felling trees needed for the craft. Other male crafts included shoe-making. More significantly, however, are some well developed local manufactures, such as cloth-making and leather, iron-smelting, and rope-making. Cloth-making reached advanced stages of development at the time of the caravan foreign trade that carried the mercantile trade across the Sahara and linked the Sudan to the Mediterranean coast and Europe and international trade. Local *dammour* weavers were found in the villages, some of whom were famed for their beautiful, fine-textured *dammours*. The *dammour* cottage industry was a skill that was passed from father to son, and acquired through long practice. The local cloth-making industry developed to such an extent and assumed such a high significance that at one stage cloth even assumed the status of medium of exchange through which people exchanged goods and services, and were thus able to engage in local transactions. The indigenous cloth-making industry was aided by the fact that people used to grow quantities of cotton locally to meet their "cloth" demands. Local cotton that was grown in the villages gave good yields, sufficient to meet local and household cloth needs. Unfortunately, the colonial state policies resulted in the virtual persecution of the local cloth-making industry. The colonial state carried out a sustained assault on the industry which has eventually completely phased out the local cottage (*dammour*) industry (for more details see previous chapter). The influx of imported finished fabrics from foreign sources displaced the local cottage industry, and it finally ceased to exist altogether.

Another local manufacture was iron-smelting. Iron-smelting had been an old manufacture in these regions. In *Kordofan*, traces of iron-smelting are still evident from the remains of ancient furnaces and churns which can be found scattered throughout ancient sites, locally called "*Abu n Kana'an*" which may refer to an ancient culture in this area, of *Anag*, Berber or Egyptian origin. Although the indigenous local iron-smelting industry produced only simple tools, these were vital technological aids given the context in which they had developed. It is possible to assume that such simple technology could have developed into more complex forms, and with continued refinement and improvement, could have in the course of time evolved into a fully-fledged industry. Like the fate suffered by the local cloth-industry, the flood of manufactured iron and steel imported from outside markets, smothered the evolutionary development of the local iron-smelting manufacture, when finally it ceased to exist altogether.

Another local manufacture is rope-making. This manufacture depends entirely on local resources of fibre obtained from the barks and leaves of certain trees (e.g. baobab and palm trees). The barks of such trees are stripped into fibres and woven into ropes. Rope-making as a local manufacture has also been greatly affected by synthetic manufactured fibres imported from outside markets, though the local rope-making

manufacture has not been altogether superseded. Rope-making still meets a sizeable portion of local market needs. Besides using traditional fibres obtained from trees, people's innovative abilities has recently discovered the potential of using synthetic fibres that can be obtained from stripping used sacks and bags which brought sugar, tea and other packed items of trade to the local market. This latter synthetic substitute did in fact relieved the pressure on trees for demand of natural fibres, and in effect is a blessing for the trees and the environment.

The case for the promotion of local manufacture and crafts rests on several arguments, which can be summarised in the following points

- efficiency; more efficient in their use of locally available resources,
- employment; are labour-intensive, and provide the major part of rural employment,
- domestic savings; provide an outlet for personal savings at low income levels,
- provision of commodities; low-cost commodities, especially for low-income groups.
- equitable income distribution; both by providing income, and supplying the needs,
- promotion of indigenous entrepreneurs; by providing more extensive training,
- conserving scarce management skills; through a less complex organisation of production,
- adapted technology; use more appropriate methods adapted to local conditions,
- skill diffusion; through labour-intensity and direct informal training,
- regional development; more geographically dispersed sites of development,
- minimising rural-urban migration; by creating income generation in rural areas,
- domestic inputs; rely largely on local inputs and expertise,
- linkages effects; have stronger linkages with the agricultural sector, by processing agricultural products, the supply of agricultural inputs and the supply of goods for the agro populations (Hansohm 1991; Hansohm and Wohlmuth 1987, Page and Steel 1984)..

The replacement of local manufactures for foreign imported goods adversely affected village social and economic life in at least four important respects: loss of employment and loss of incomes for many of the village households; gain and profits realised by the village traders who trade in imported items; the divergence between the loosing and the gaining parties directly feed into the process of rural social differentiation. A fourth dimension implies a long-term change which transforms the rural village economy from autonomy to dependency. Local manufacture contributes to increased internal exchange and circulation which allows for the possibilities of internal growth. The demise of local manufactures inhibits internal exchanges, circulation and growth; since the value of rural labour instead of being circulated between different sectors of the economy according to local supply and demand factors, is being transferred through the village traders to outside markets. The change implies an economic transformation in which the

rural village economy becomes an economy of "drain". Capital which could have otherwise accumulated locally, to lead to secondary or tertiary phases of development of indigenous manufactures, is transferred in the economy of "drain" to the regional (*El-Obeid*) markets and beyond. Local internal economic growth would not be possible, economic stagnation and bankruptcy is more likely to be the outcome.

6- 8- Impact of Change on Coping Strategies

Food shortage is a recurrent problem affecting the rural communities inhabiting these Northern regions of *Kordofan*. However, the local populations have evolved survival strategies and responses to cope with occurrences of food shortage. The problem of food shortage and associated hunger varies both in intensity and frequency. Its intensity and magnitude varies from the regular mild hunger season, to the more acute form of famines; and in frequency from seasonal to annual outbreaks of famines. The rural communities, however, conscious of the hazards of an uncertain environment, have adapted their way of life and evolved strategies of coping with the perceived risks attendant on food shortage. These strategies include short-term responses that can be enacted during transient stresses, and long-term adaptations to more secular pressures and constraints. It has been noted that people's strategies of coping with hunger take a hierarchical form in that some are responses that can be enacted in periods of mild stress conditions, while others are employed only at times of serious hunger. The latter group of responses comprise the coping strategies and adaptations which can be more vigorous, but less attractive since they typically involve taking tough decisions such as migration or liquidation of household assets. It has yet to be established the stages of progression in which mild forms of food shortage develop into acute hunger unto full-blown famines. What exactly determines the "threshold" demarcating the boundaries of a regular hunger period from that of a famine condition. Indeed, it has to be recognised the difficulty of establishing "thresholds" for the different stages of hunger, since the boundaries between phases are blurred and not so clear as the stages of development merge into one another. Therefore it is only possible to expect a great degree of overlap both in the characterisation and identification of the different stages of hunger, as well as in people's responses to them.

The local populations employ different strategies to cope with hunger stress. It is possible to identify different phases in the development of a hunger situation (Sen 1981; Dreze and Sen 1989; Campbell and Trecher 1982), and different strategies deployed at different stages. These authors tend to agree to a broad hierarchy of three stages of hunger. Sen (1981), for example, distinguishes between three levels of food shortage: (1) *lowness of the typical level food consumption*; (2) *declining trends of food consumption*; and (3) *sudden collapse of the level of food consumption*. Campbell and

Trecher (1982) also distinguish three stages: (1) an annual hungry season; (2) shortage of food due to economic factors characterised by a breakdown of co-operative efforts; and (3) a food consumption deficit corresponding to the word famine. These are broadly: (a) a first stage of a mild regular "hunger season", (b) a second stage of "normal" hunger; and (c) a stage of intense acute outbursts of famines. Variations in people's responses and strategies of coping can be observed. Variations of responses from normal transactions and exchanges to less attractive choices of migration and liquidation of assets closely correspond to the intensity of the food situation as it worsens.

6- 8- 1- Responses to Seasonal Hunger:

The village communities in rural *Kordofan* face a seasonal hunger period each year with which they have developed certain mechanisms of coping. This seasonal hunger period develops annually towards the end of the rainy season at which time the grain stock reserves from the previous harvest will by this time be almost completely depleted, and the grains of the new harvest are not yet ready. The hunger season extends roughly between July and end of September. It is a hard time of acute hunger when grains are short everywhere. Indeed, the local lore is replete with names and anecdotes describing the exigencies of hunger stress. This seasonal hunger is euphemistically denoted by the phrase "*Mefraq el-Habitein*", literally meaning "the divide between the two grains"; implying a period of falling grain stores between the depleted stocks of the previous harvest and the next one just ahead. This is a time of pervasive hardship for all, of general weakness when everything is in short supply. The local populations are just emerging from the taxing labour and toil of the planting and weeding operations, exhausted and weak, grains are everywhere short or non-existent, and with no money income to relieve their dire need. Animal prices are low as a result of the general lack of money locally. It is at this period that the trough is at its lowest and the local communities are most vulnerable. At this critical time of year, those of the village members who have grains in store resort to unearthing their stored grains and lend it to deficit households; or the latter borrow small quantities of grains from kins and relatives. However, while thus extremely vulnerable and awaiting the maturity of the new harvest grains just ahead, the local populations employ a number of strategic responses to cope with this transient hunger period.

6- 8- 1- i- Planting (*Jubrakas*) House Orchards with *Quick-Maturing Grains*:

Being always conscious of the inevitable hunger period, village households respond by sowing the house orchards with some carefully selected grain varieties of quick-maturing qualities. This is a domain exclusive to women. From the previous harvest,

women take great care to select several heads of quick-maturing grains and set them aside as seeds for the next planting season. Immediately at the onset of the first rains, these are sown around the house (hence house orchards). This early planting is intended to allow for their optimum growth period so that they mature up early enough to stave off the inevitable hunger period and relieve the household at the most critical and vulnerable time. Women play the key role in this important food security mechanism. Households still sow the *Jubrakas* (house orchards) with quick maturing grains. This is one of the strategies which still remains intact. Other responses to cope with the hunger season include exploiting the local fauna and flora. A range of edible plants, roots, leaves, berries, fruits are collected and prepared as foods and salads. Some hunting is also undertaken for some birds and wildlife animals. Unfortunately, the environmental problems attendant on the development policies and the consequent loss of many local faunal and floral species has curtailed the options offered by this important strategy (for details on lost species, see appendices H, I, and J).

Another set of responses involve local reciprocal obligations between communities and among households. It is an established feature of village communal life that grain reserves that could still be available in some of the neighbouring villages, or kept in the granaries of some notable men, should be distributed and loaned out to people, who would almost all be short of grain at this time. The loaned grains will be paid back after the harvest in the same quantities borrowed, without interest. Lending grains to relieve the need of community members is regarded as an obligation of high social moral value which earns one the society's respect and esteem, and indeed a great deal of social and political influence. Reciprocity has been seriously weakened, especially inter-village borrowing of grains. Reciprocity within the village households still holds, but in a somewhat diluted form. Loans of small quantities of grains are reciprocated between households, Fortunately though, that the hunger period coincides with the time when animals are at their best of yields of milk and milk products which largely mitigate the diereases of the situation. Households rely heavily during this period on milk and milk products to supplement their diet of the remaining meagre grains.

An understanding of the association between vulnerability and seasonality in the hunger period could better inform intervention efforts and can go a long way to relieve the hungry by targeting this particular state of generalised food shortage and physical and economic weakness during this season. The hunger season is a more definitive and predictable occurrence which can be easily targeted by intervention relief action. It is also more predictable in the way it merges into the second phase of a more serious hunger situation. Since the hunger season is time-limited to the period between July to end September, a protraction of the stress condition beyond that time limit can usually index the seriousness of the situation to have passed the "threshold" of the regular

hunger season. This is because many of the strategies of coping are short-term responses designed to meet the transient condition of stress within a perceived time period. A protraction of the stress beyond that time limit, would imply the stretching of these responses and render them in-effective. Another important time factor is the maturing of the house orchards crop which is usually calculated as to ripen at exactly the time to relieve households in the hunger season at about September. A progression of the hunger situation beyond September, would typically imply a complete or partial failure of the house orchards food crop, which may portend of a more generalised failure of the whole food harvest, though the relationship between the two does not necessarily follow.

6- 8- 1- ii- Grain Food Stores (*Matmura*):

As we have seen, food grain stores are a well established tradition in rural *Kordofan*, that in good years people store those quantities of grains in excess of their immediate consumption needs in pits called *Matmura*. Grains can remain in excellent condition for up to fifteen years. Each household have their own grain store, *Matmura*. Melon seeds can also be stored in such pits. Grain stores are replenished each good successive harvest. In bad years, people use their food grain reserves thus stored during good years. Under the market forces and the commercialisation of food crops, this food security strategy has been seriously undermined, since surplus production instead of being stored for future security, immediately finds its way to the market for cash. Need for cash to satisfy other consumer needs impels the majority of households to sell part of their food grains as early as the beginning of the harvest season.; since food grains have become a cash earner under the commercialisation of food. It is indeed interesting to note that even when the food harvest falls short of meeting the household's food requirements for the year, i.e. there is no surplus food, still a considerable part of the crop is sold in the market for cash. This is particularly so for poorer households who make the major sellers of food to the village merchants, only to buy them again at very high prices at a later time. The pressing need for cash is the main factor behind the collapse of the traditional food storage strategy for better food security.

6- 8- 1- iii- Communal sharing:

Communal sharing of food and other resources is another form of social response to the hunger stress. In good years, households store their grain surpluses in pits. When harvests are bountiful, such grain reserves may last a household from between two to five years. When the years turn bad and harvests poor, those members of the community who retain quantities of grain in their stores, open these up to relatives and kins who are in need, or the head or notable(s) of the community open their grain stores at the time of

the first rains. Loans of grain among households is a common social reciprocal practice. Such loans will be repaid the following harvest(s) in the same quantity borrowed, without interest. The freshness of the new grain is considered a good enough interest. The distribution of the *Zakat* (Muslim tithe) from the wealthy to the poor is another distributive device. Borrowing of grains, animals for milk, and money from kins, friends and acquaintances is another established communal sharing strategy used to offset stress. However, in recent times, communal sharing has much diminished, as people rather take their surplus resources; of food and animals to the market for cash. The social rewards of respect and prestige which motivate redistribution in the past gave way to the pursuit of personal gains and the maximisation of money returns which can be realised by sale of such surpluses in the market.

6- 8- 1- iv- *Sharing the Available Food:*

In the past it is customary that people generally (in normal and stress times) share food by eating collectively in groups in a specified meeting place called *dhara*, where neighbours and relatives gather at meal times in a specified rendezvous, usually the abode of the elder of the family. This is usually a *Rakuba* attached to a *Khalwa* forming a thatched shelter in which the *dhara* meets. The group forming the *dhara* gather in such a meeting place, each bringing his food with him. Those who come early wait for the other members until all or most are present, and then eat their food collectively. The women meet in a similar fashion in a separate quarter. After and during the meal, they exchange information on local affairs, and chat, while after the meal they simultaneously carry on some of the chores, such as rope-making, wood-crafts, or cloth-making. Sharing food in this way provides a socially sanctioned entitlement to the right of food for all members, and surely for those members who may be short of food for any reason, are quite at home to share food with the other members. The remaining food after the diners take their fill, is carefully covered and put aside for any late comers or guests who may drop by at any time. The tradition of sharing food in the *Dharah* has virtually disappeared in recent times, not for want of food, but because members of the community have become too individually pre-occupied with their own worries and concerns to afford to spare time to come together for sharing food and other concerns. It is indeed one of the most telling examples of the process of individualisation as a social phenomenon associated with the effects of pressures and demands imposed by market forces on individuals.

6- 8- 2- Response to Endemic Hunger:

This stage is distinct from the hunger season, but can more closely be associated with it, and can readily develop and merge into a famine situation. Normal or endemic

hunger is a common feature of life in many poor rural communities throughout the world, which is more a condition of endemic poverty than of food availability. This type of hunger is more a condition of economic stringency in poor people's purchasing ability and market power than one of seasonality or dearth. It can be seen as a result of food entitlement failure (Sen 1980), affecting those segment of the society who, due to their economic weakness and general lack of power, have neither the financial means nor the necessary social-security arrangements to alleviate their want. A characteristic feature of endemic hunger is that it typically and consistently affects particular vulnerable groups in the society. A general classification would identify such vulnerable groups to include asset-poor households, women-headed households, households short of adult labour, households predominantly composed of sick or aged members.

However, regular endemic hunger as affecting particularly vulnerable groups in the society, is usually contained within the community. Foremost among the strategies of coping with this type of hunger are borrowing, reciprocity, redistribution, kinship and patron-client relationships, labour and the collection of forest products. Reciprocity involves household-level exchanges of quantities of grains or money. Redistribution takes several forms, including direct charity endowments, especially to poorer kin families or friends, in forms of gifts of grains or money. Other forms of redistribution is collective sharing of meals, the giving to the poor of the religious tithe. Better able households have a social responsibility towards their poorer relatives, therefore, it is an obligation to assist poorer kins and relatives by supporting them when in need. Income from selling out one's labour either in the village or locally in the surrounding villages. This type of hunger may sometimes induce limited migration to urban centres, but migration to cities is usually a strategy characteristic of a more serious famine situation. Also poorer households resort to the collection of forest products notably charcoal, wood poles and firewood. The liquidation of assets such as animals and valuables is necessary to keep the household maintained. However, liquidation of such assets may reserve the more important productive assets for future security to guard against complete destitution. Hunting used to be one of the strategies of coping with this type of hunger. Unfortunately, the disappearance of many wildlife species rendered this strategy rather ineffective in recent times.

6- 8- 2- i- Borrowing Grains (Gurdah):

Borrowing grains is another very important strategy which the local populations employ to cope with frequent food deficits. Borrowing grains is a firmly established practice among the rural populations and is executed in two forms: inter-village and intra-village borrowing. A basic principle for grain borrowing to be viable is, of course, some grain reserves somehow have to be available in the village or in neighbouring

villages. This is guaranteed by some notable individuals in the locality who are famed for their meticulousness and attention to growing and storing grains. Such men keep large quantities of grain reserves in large *Matmural*s (grain pits) for most years, aware of the vicissitudes of the environment and the inevitable local needs for food, thus they serve as the final resort to which people turn when need arises, and borrow these grain reserves to repay them at harvest time without increment or interest.

6- 8- 2- ii- Inter-Village Grain Borrowing:

This form of grain borrowing takes place inside the village between excess and deficit village members. The needy village households who are short of food grain come to those men and borrow the grains and repay it at a later time in the same quantities borrowed. This form of grain borrowing takes an established social institution of rights and obligations. The social institution obligates those individuals who have stores of food grains in reserve, to distribute the food by lending it to needy households without interest. At the same time it confers social status, dignity, respect and esteem on such men, implying the attainment of social and political authority. Occasionally, a lender is entitled to a day's work from the borrowers in a form of a work party in his farm, after which the grain store is unearthed for distribution. The village households in need, have a right to borrow the food, on an individual basis in the case of inter-village borrowing, and collectively in intra-village relations. Individually, the man heading the household borrows the grains, and undertakes that he will repay the borrowed amounts at a specified time, usually after the harvest. This individual personal contract between lender and borrower takes place mostly in inter-village relations since both parties know one another personally, therefore, eliminates the need for any form of guarantees.

6- 8- 2- iii- Intra-village Borrowing:

This form of grain borrowing takes place between neighbouring villages, and is conducted collectively in a form of representation. Here, a man or a group of men from a deficit village undertake the borrowing on behalf of the larger group, e.g. a village. This implies that there may not be a direct relationship between lender and borrower. Thus, when the whole village is under stress, the *Sheikh*, possibly with two or three men from the village members, go out to borrow grains from a man whom is known to have grain reserves, undertake the borrowing on behalf of the whole village, come back with the grains, distribute it among the needy village households according to size, need and the ability to repay. After the harvest, they collect the grains from each borrower and repay back to the lender. No interest is involved in this borrowing. The only benefit the lender gets is a social moral one of gratitude and respect. But also, and perhaps more

importantly, is an entitlement to help or service in any form the lender may demand; and certainly when he may one day fall victim to adversities.

An instance of collective grain borrowing occurred in *Omdofais* village in around 1914. *Sheikh Salim Ajab al-habib*, *Sheikh* of the village, related that in that year there was a poor harvest, and there was no sufficient food to carry the village population through to the following harvest. By the mid-rainy season, the village grain stocks had been completely depleted and the majority of the village households ran out of food. The *Sheikh* knew that other neighbouring villages were not as bad. Moreover, the *Sheikh* of the neighbouring village of *al-Rigaiba*, *Sheikh Gaddal*, had sufficiently large grain stocks in his *Matamir*. *Sheikh Salim* of *Omdofais*, together with two others rode to *Sheikh Gaddal* and borrowed grains on behalf of the village population. That year was named *Sanat al Ilaiba* in view of a small measure used for measuring grains. Both forms of grain borrowing represent mechanisms of redistribution and are called *Gurdah* meaning grain borrowing which involves no interest and the grains borrowed are repaid in the same quantities borrowed.

Borrowing grains was a common feature of rural social life in the past, and important men normally keep sizeable quantities of grains stored in pits called *Matmura*, or *Shuna*. The fact that the borrowing involved no interest was conditioned by a socio-religious ethic. It is considered religiously unsanctimonious and socially ethically unacceptable to seek profit or exploit the need of other people for material gains and profit maximisation. This is considered mean. The local village informants at *Al-Saata*, related that the people in the past considered excessive profits to be *haram*; forbidden or immoral from a religious point of view. For that reason, many of them who had the means and capabilities to become wealthy merchants refrained conscientiously from engaging in trade from moral and religious compulsions. And instead of engaging in trade themselves, they preferred, nonetheless, to help others who had the guts and no qualms about the immorality of trade. Many of the local people helped the *Jellaba* traders by giving them the necessary capital, entirely interest-free, to enable them carry out their trading activities. Understandably, grain- least of all- should enter into trade and profitability. Should that happened, would have been the meanest of all practices of men to seek profit from exploiting people's basic necessity of life; food. Therefore, food remained outside the market arena, until about the second quarter of this century. In short, food resources had remained entirely within the control of local people for the satisfaction of local food needs. The intensification of market relations ushered in a new era in the domain of the food resources, its availability and control. But when grains are not available either in the village stores or in other villages in the neighbourhood, this usually implies a more acute food situation on a large scale affecting wider communities verging on a famine. Other strategies are deployed to cope with such a food deficit.

6- 8- 2- iv- Movements and Travelling to Other areas:

When faced with a large scale harvest failure, people move to better food secured areas. Households or individual persons move to live with relatives or friends in the more food-secure areas. They may also live temporarily in such areas as guests, or work in the fields for a share of the crop. They may employ their animals, mainly by hiring their camels for transport. By such means of work, hiring camels, or from contributions of grains from relatives and friends, people from distressed areas can collect reasonable quantities of grains from the food-surplus hosting areas. And having spent the harvesting season, and most of the summer months in the temporary hosting area, those amounts of grains which they had been able to collect, would suffice for their food requirements for the planting season when they return to their villages for plantation for the new season. Their food needs are thus secured to carry them through to the next harvest. Better able households send some of their male members to procure food grains either by sale or work from areas further afield. This option would require some assets such as money with which to buy food and camels since it involves a good deal of travelling to better food-producing areas. Such travelling has mostly been directed to the *Nuba* Mountains where food grain production is more reliable, and also to *DarFur*. Quantities of grain can thus be procured and transported back to the households left behind in the villages.

6- 8- 3- Response to Acute Widespread Hunger (or Famine):

The threshold that may demarcate the transition of a situation of normal hunger to more acute widespread famine is more fuzzy than that of the hunger season. Since normal hunger could be said to be confined to particular vulnerable social groups, a situation of a widespread hunger is therefore indicative of a pervasive vulnerability engulfing the wider community or the majority of its population. The immediate implications of this is that a severe widespread hunger necessarily implies a breakdown of the normal ways of coping with transient stresses since the majority of the community are in the same boat. Therefore, the more obvious indicators of a serious hunger situation would be the disintegration or atrophying of the usual coping mechanisms such as reciprocity and kins relationships. This would also be reflected in the social environment in terms of strained social relations. The situation of such engulfing stress would usually trigger massive exodus of people from the rural areas to the urban centres. Another very salient indicator for the onset of a serious hunger situation is dramatic upheavals in the state of internal markets, either for foodstuffs or animals' sales and prices. It is characteristic of a severe hunger situation the observation of the rocketing high food prices and the plummeting of animal prices. While the situation can look grim, people can tenaciously cling to whatever may save their lives.

The patterns and strategies of coping with a severe hunger situation, are understandably less attractive and more disheartening. The less attractive choices that have to be made include the liquidation of more valuable productive assets such as breeding animals; valuables such as gold and silver possessions; and strategic reserves such as seeds of crops that have been reserved for plantation. The liquidation of such valuable assets implies that the tough decision of liquidating productive and strategic assets has to be taken even though it means risking future security and the looming indignity of penury, poverty and destitution through assetlessness. Other more disheartening measures include reduction of meals in quantity and quality, going hungry, the resort to the use of wild fruits and berries which can be unpalatable and sometimes toxic, beggary, prostitution and theft are also part of the scenario to add to the unsavoury picture. Large-scale out migration is one important strategy and indicator of a widespread catastrophic hunger. The occurrence of such a wrenching disaster, if not contained speedily and effectively, can lead in many respects to dramatic social and political upheavals, of social disintegration and political unrest with deep-reaching fissures to national socio-political cohesion.

The tenor of this account is that conditions of stress associated with fluctuations of the climate and harvests were frequent in the past among the *Hamar* and *Dar Hamid* of *Kordofan*, but that the occurrence of mass famines had largely been averted by various forms of adaptations and responses available to the rural populations within the limits of the resource endowments available in their local environment. Adaptations, can be understood to entail harmonious relationships between the natural resources available in the eco-system, their systems of management, control and optimal utilisation of such resources for the sustainable satisfaction of social needs. The balanced relationships of the eco-systemic components informs our understanding of local food security and livelihood which become conditional on maintaining the relationships between the physically available natural resources, and the human social needs permanently in balance through wise management systems whose paramouncy is sustainable use of resource utilisation for long-term security. This harmony has been upset by the policies of transformation, which ultimately affected local food security in serious ways.

CONCLUSION:

The discussion in this chapter is to contend that local production which was formerly meant for local security, has undergone radical restructuring towards commercialisation under the central state development planning. Many of the local agricultural products such as sesame, groundnuts and even the food staples such as millet and *dura* were now increasingly drawn into the market for both local and export trade. Crops used for local utility such as cotton formerly used for local cloth making industry were discouraged

and even forbidden. New crops, such as groundnuts were introduced solely for commercial purposes. Under the state's development policies, *Kordofan* rural economies were, for the first time, undergoing profound transformation and restructuring around the new forces of the market exchange relations, in which the local producers found themselves engaging not only as producers for national and international markets, but also as consumers of the vast array of manufactured consumer goods now flooding the regional markets and village shops. The transformation of the rural economies was pursued and commercialisation of rural production and exchange was permanently set in motion. The direction of production to the market ultimately linked the rural economies to the wider national and international markets. This has disturbed established structures of production and exchange, and caused their subsequent subsumption, subordination and eventual replacement with the new structures of the market mediated mainly through the machinery of the state. Local producers find themselves engaging in exchange system over which they have no control, and only as the outer fringes loosely and precariously linked to an international market system. As they have become dependent on the market, they have also become more insecure and more vulnerable to natural and market fluctuations, their established strategies of coping severely curtailed..

Chapter 7

The Famine Crisis and Household Responses

Introduction:

Conventional famine theory views natural phenomena such as droughts as the main cause of famine. Another view treats such short-term shocks as "trigger" or "precipitating" factors which set in motion a chain reaction of events whose origins lie in long-term processes of socio-economic and political nature which render rural populations vulnerable to famine. This chapter supports this second view, and argues that drought occupies a terminal point in the chain of causality of famine. In this chapter I follow the process of famine as it actually affected the lives of the people in two villages, assess the real causes and effects, and peoples adaptive responses to the conditions of stress in the course of its development into famine.

7- 1- The Two Villages:

7- 1- 1- Method of data collection:

Two villages have been studied. The method employed for the study has been open-ended discussion interviews and statistical estimates on the household economy obtained from the respondents to elicit approximate quantitative data. No formal questionnaire has been used. Statistical information is difficult and much of it unreliable. No records of any kind were available, and the people rely on memory which itself is rather unreliable and can only offer scanty evidence. Lack of resources is another limiting factor, and I had to rely entirely on my own limited resources to collect the data. I resorted to the use of official documents in the Regional Government Departments in *El-Obeid* to get some information. Even here suspicion and official reluctance to co-operate made the quest of obtaining the required data more difficult. I did use other sources of statistical information; particularly two survey reports: one unpublished report prepared for CARE-Sudan Relief Response Unit on North *Kordofan* between 1991/92 (see El Amin 1992); the other a published survey report by IFPRI in 1988 (see Tesfaye et al 1991). Other sources also included two Dissertations on famine in *Kordofan* in 1985 (Adeel 1985, and Ibrahim, M. 1985).

7- 1- 2- Location:

The sample of the study is taken from two villages in North *Kordofan*: *Al-Saata* in *Dar Hamid*, and *Omdofais* in *Dar Hamar*. *Al-Saata* lies approximately 60 kilometres North of *El-Obeid* and about 40 kilometres West of *Bara*, within the 14⁰ and 12⁰ N latitudes semi-arid zone. It is linked to both *El-Obeid* and *Omdurman* by road, and lorries leave every day to these two market centres. *Omdofais*, represents *Dar Hamar*,

and it lies approximately 140 kilometres mid-way between *El-Obeid* to the East and *En-Nuhud* to the West, within the 13⁰ and 12⁰ N latitudes savannah (*Goz*) zone.

7- 1- 3- Population and Demographic Structure:

The village of *Omdofais* is one of 438 village Councils comprising *En-Nuhud* District (*En-Nuhud* is the centre of the *Hamar* Nazirate). The population of *Omdofais* are entirely of *Hamar* origin. It is a small village of about 1200 inhabitants, making some 185 households. More recently since the early 1980s, small numbers from other groups, such as *Beni Jerrar*, *Shenabla*, and *Kababish* came to live in the vicinity of the village in smaller settlements occupying part of the village land. *Al-Saata*, on the other hand, is one of 198 Village Councils comprising *Bara* District (*Bara* is the centre of *Dar Hamid* Nazirate). Its population comprises various sections of *Dar Hamid* (for more details see chapter 3). *Al-Saata* has a population of about 6,000 inhabitants divided between three residential sub-villages. One of the three smaller villages has been selected for the study, with a population of about 2000 people, making some 285 households. Smaller settlements of other tribes, especially *Kababish*, *Beni Jerrar* and *Kawahla* also occurred in the vicinity of the village since the drought years of the early 1980s.

The demographic structure of the population reveals slight variations between the two villages, reflecting perhaps minor differences in natural resource endowment and economic activity. The majority of households are composed of the family unit, with the husband, wife and their children. Average family size is approximately the same in the two villages, averaging between 5 to 7 members per household. El Amin in Care's programme area (North *Kordofan*) estimated average household size to be about 10 persons per household; and added that "this average size of the household might seem to be relatively high when compared with the usually estimated one of 5 to 7 persons per household for the state of *Kordofan*" (El Amin 1992: 5). The high family size is attributed to the incidence of compounded families which characterise agrarian societies. This estimate is too high. In my study of the population in the two villages, my computations included both independent and compounded families, giving an average size of 5 - 7 persons per household. The composition of households in terms of age and sex structure shows the number of women to be higher proportionate to men, coupled with a conspicuous absence of adult males in the age groups between 20 to 45 years of age; reflecting no doubt the high levels of out-migration from the villages to outside labour markets. This is more evident in *Al-Saata* than in *Omdofais*, indicating that out-migration is relatively higher in these northern parts than in the southern parts of the region. The proportion of children is also high relative to adult age groups. This means that there are more households dependent on women for their livelihood, and more children to care for. Women-headed households are relatively smaller in size 4- 5,

and they represent one of the most vulnerable groups worst affected by the famines. The number and ratio of women-headed households to those headed by men is as follows:

Table 12 Number and ratio of women-headed to man-headed households.

Type of Household	no. of Household	% to total Households	total of Population	% to total	Aura Size
Omdofais:					
<i>man-headed</i>	150	80	1003	89.4	6
<i>woman-headed</i>	35	20	119	10.6	4-5
Al-Saata					
<i>man-headed</i>	225	79	1700	85	6.5
<i>women-headed</i>	60	21	300	15	5

Field-Work Data 1993.

The number of women-headed households represents about a fifth (20%) of the total number of the village households in *Omdofais*; and relatively higher in *Al-Saata* (21%). The causes that led to the absence of a male partner in sharing the responsibilities for providing for the family vary from death, divorce, abandonment of the family, and weakness of the man either by old age or sickness, and other causes. A close look at these causes of the absence of the male reveals that the major cause is death, suggesting perhaps a high death rate concurrent with shorter life expectancy among the village population. The third cause is abandonment of the family, which suggests that the man, as provider, fails to provide for the family, therefore just leaves. Many women find themselves in the position as main providers of families where children especially are in a dire situation of basic food needs. The burden on such women can be unmistakable, and the households who depend for their basic livelihood on women as main providers, are the most vulnerable and food insecure.

Another characteristic feature of the households is the low ratio of adult males relative to other age groups. This is mostly attributable to migration either internally or externally (see below). The households are mostly composed of older men, women and children, and the smaller number of adult males are those who are either engaged in trade, livestock, or other activity, or else awaiting the opportunity to migrate for work outside the country. The implication of this unbalanced ratio is that the responsibility of the household reproduction has been divided between the household members staying in the village doing the farm work, which is insufficient for the purpose of reproduction, therefore has to be supplemented by income from the labour of migrant members to outside centres of the labour market.

7- 1- 4- Land Resources and Household Allocations:

According to the Sudan Land Laws, all land in the rural areas belong to the state. However, this legal state ownership of land is vested in the hands of the village *Sheikhs*, who allocate land to the village members. There are no restrictions or limits to land

allocations to individual households or persons. And until now, there is no scarcity of land, and individual persons and households have absolute right to the lands granted to them by the village *Sheikh*. The only condition is that they keep the land in continuous use. And although there is no formal registration of lands in the rural areas, holders of land can use it themselves, grant it to others, or pass it as inheritance to children. The general norms governing utilisation of land is that land is considered a communal property, and land resources, especially grazing is a common resource for all. The land area around the village can be classified according to the following uses:

- farm lands,
- grazing lands,
- forest lands,
- populated lands,
- water bodies.

This classification is not strict, and considerable overlap of use occurs in the same area of land. Forest lands are also grazing lands at one and the same time. Grazing lands and forest lands also constitute land reserves for future farming, reserved as fallow in the general cycle of land use intended for regeneration of soil fertility.

7- 1- 4- i- Farm Lands:

Farm lands are generally closer to the village, and form the numerous small farm plots of the village households. Because farm lands vary according to the type of soil and the level of soil fertility, better and more suitable lands are relatively scarce, and frequently subject to increasing sub-divisions among the family members. On average, the family farm size is about 30 *makhamas* (52.5 *feddans*) for the average household (one *makhamas* = 1.75 *feddan*, = 1.81 acre). With an average family size of a maximum of 7 persons, this allows for a per capita land allocation of no less than 7 *feddans* (for family average farm size and production, see table below.). All farm lands are under traditional rainfed farming. Evidently, there is no problem of shortage of land. There is however, a problem of land quality, since the quality of land has deteriorated mainly due to the massive expansion in cash crop production, especially groundnuts in *Dar Hamar* during the 1960s and 1970s (Ahmed 1988). The relatively large size of family farms can be seen as a reflection of low yields which impel the village farmers to cultivate more lands, therefore have to put in more labour.

7- 1- 4- ii- Grazing Lands:

All lands that are not under cultivation are considered as grazing lands. Farm lands, moreover, revert to grazing after the gathering of the harvest. Forest lands, which are farther away from the villages also provide additional grazing reserves for the village animals. There is no allocations of grazing lands, and grazing is considered to be a common resource for both the village animals and animals coming from other areas.

However, individual animal owners graze their animals on the stalks and fodder remaining in their fields immediately after the harvest. Because of the common ownership of the grazing rights, and the individual ownership of farm lands, clashes frequently occur between farmers and herd owners using the common grazing when their animals trespass and invade the farms since there are no demarcations separating the farms from the grazing lands. These clashes have become more intense and more frequent as a result of the expansion of farming causing a contraction in grazing lands. The competition between the two is one of the major causes of tension and disputes in the rural areas. The botanical character of grazing in *Dar Hamiid* and *Dar Hamar* has the following three grass structures with minor variations from one locality to the other: (1) grasses and herbs; (2) bushes and shrubs, and (3) scattered tress (SRAAD 1992). These three categories are thoroughly interspersed with one another, with more grasses, herbs and scattered tress predominate in *Dar Hamiid*, and more grasses, shrubs and bushes characterising *Dar Hamar* grazing lands.

7- 1- 4- iii- Forest Lands:

Forest lands are those areas which are currently supporting forests, especially gum forests, but which also provide grazing and form land reserves for future use. Forest lands form extended expanses of lands that surround the villages in all directions, which are legally under the authority of the village *Sheikh* to dispose of on behalf of the state. There are no allocations of forest lands, with the exception of gum gardens, which are individually owned to particular members of the village population. Forest lands support a variety of tree species, unfortunately many of which have already disappeared, and many fast disappearing. SRAAD resource inventory identifies some 14 different tree classification types found in forest lands in the locality of *Omdofais*.

7- 1- 4- iv- Populated Lands:

Populated lands are those lands which are occupied by the village population in the form of sedentary villages. The main village (in this case *Al-Saata* and *Omdofais*) may be surrounded by smaller settlements of a few families from among the semi-settled groups, who have relatively bigger herds of animals than the sedentary villagers therefore prefer not to settle permanently in villages. These are temporary settlements who spend some years in one locality, then move on to another. Only the *Sheikh* of the village has the power to grant or refuse to grant a request for such temporary settlements from other groups not ordinarily resident in the *Dar*.

7- 1- 4- v- Water Bodies:

Water bodies are those lands which support water, e.g. running water courses, pools, lagoons, or lakes. Both *Al-Saata* and *Omdofais* villages are located in sandy *Goz* lands

where the runoff does not permit for water to collect, and the rain water saps into the ground where it falls. There are a few water collecting points at the foot of *Wadi*; which form *Rahads* or *Fulas* (collecting water pools), or shallow underground water. These lands supporting water sources are common property for all, are not to be cultivated, fenced or terraced for individual private use.

7- 2- Production:

Production systems in *Kordofan* generally fall in one or the other of two main dominant activities: sedentary farming and livestock production. However, this broad classification is only a rough generalisation, for there is hardly any groups in the area of study who fall unambiguously in one or the other of the two domains. Rather, the two systems of production are combined in varying degrees, and the terms sedentary farming and pastoral production can be understood to refer to which of the two systems is more dominant over the other. In sedentary farming, agriculture predominates as the main production activity, but farmers, who are mainly settled, also raise animals and some families migrate with the animals for a few months of the year. Likewise, in pastoral production, animal husbandry predominates, but pastoralists, who are semi-settled also engage in agricultural production for a considerable part of their labour time. Gum collection is another form of production activity in the area of study, which, for a lack of an appropriate designation, we include under agricultural production.

7- 2- 1- Livestock Production:

Livestock production is considered as an investment activity which is undertaken with a view of giving the owning household better chances of security. As such, maximisation and diversification of production are undertaken for that concern of security and reproduction. The bigger and the more diversified the herd, the more secure the family unit. The management system of animal production is basically sedentary in nature, where animals exploit the relatively unrestricted grazing lands around the village during most of the year. However, a few families of the village members who own sufficiently large herds of sheep or camels, undertake seasonal migrations with the herds. These seasonal movements are undertaken mainly by adult males, in which they migrate northwards during the rainy season, and southwards during the dry season; but settle during most of the year around the villages. Most of the village households own an average of 4 goats, 2 sheep and one cow or camel. These averages are very low suggesting that there has been a long term process of decapitalisation and impoverishment of the households who were once wealthy pastoralists owning large numbers of livestock. The following table shows household average ownership of assets of the different animals:

Table 13 Average number of animal assets & value per household for the different animals in *Al-Saata* and *Omdofais* in 1991/92: (in heads):

Village (Area)	Goats	Sheep	Camels	Cattle	Value (£S)
<i>Al-Saata (Bara Area):</i>	3.2	1.3	0.6	0.0	16610
<i>Omdofais (En-Nuhud Area):</i>	3.7	1.7	0.2	0.2	10965

Sources: El Amin (Care's Survey Area) 1992: 29.

However, a trend of decapitalisation seems to have been in process since about the mid-1970s. These two trends of decimation and decapitalisation can be understood by comparing current figures of the household livestock assets with long term averages, as the table below may indicate.

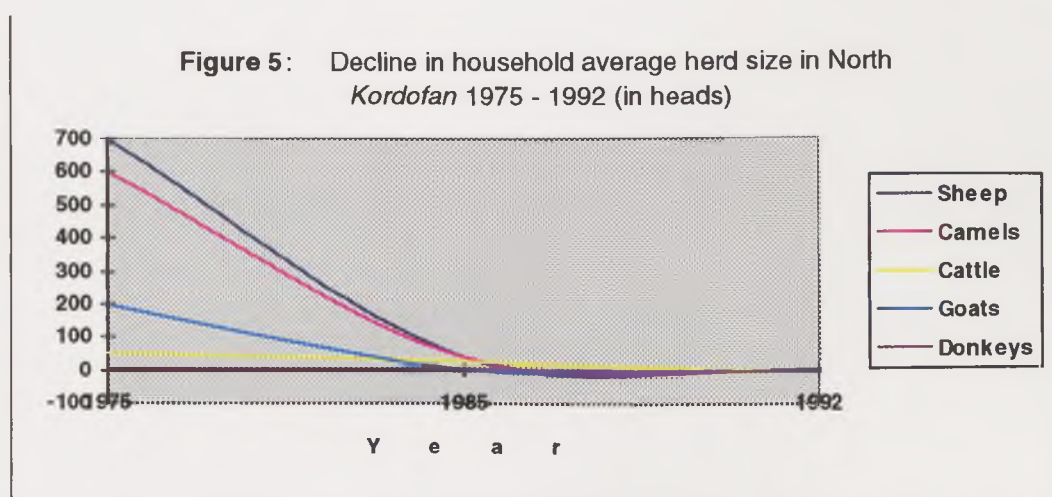
Table 14 Decline in household average herd size of the different animals in North *Kordofan* in three periods between 1975 - 1992 (in heads))

Year	Sheep	Camels	Cattle	Goats	Donkeys
1975	700	600	50	200	6
1985	40	40	28	3	1
1992	1.5	0.4	0.1	3.5	0

Sources: Regional Ministry of Agriculture, *El-Obeid* 1985.

The figures for 1992 calculated from El Amin 1992.

Although the figures in the table represent average herd sizes for North *Kordofan* as a whole, they may need to be slightly adjusted in order that they be more representative for *Dar Hamid* and *Dar Hamar*. *Dar Hamid* generally own bigger camel herds than the *Hamar*; whereas the *Hamar* own bigger cattle herds than *Dar Hamiid*. Therefore, these figures in order to be more representative, need to be adjusted downwards for cattle in *Dar Hamiid*, and upwards for camels. The decline in average herd size can be shown graphically in the following:



Nonetheless, the figures clearly indicate a huge loss and decapitalisation for the households over the long term, especially if it is recognised that livestock represents a

major asset, and possibly the sole investment avenue open to the local producers. The dimensions of impoverishment are indeed staggering.

7- 2- 2- *Agricultural Production:*

Farmers in the two villages produce a variety of cash and food crops. Farming in *Dar Hamid* and *Dar Hamar* is primarily rainfed, and farmers have small holdings of farm plots which they cultivate with cash and food crops, and harvest gradually over a period of 4 months between October and January. Food crops are produced mainly for home consumption, but surplus production is also sold in the market; while cash crops are produced mainly for the market, but also small quantities are consumed at home, such as sesame. Cash crops include especially: groundnuts and sesame; and two minor crops: hibiscus and melon seed. Another important cash product is gum Arabic. In the village of *Al-Saata*, the main cash crop is sesame, and there are different varieties grown in the locality. Groundnuts do not produce well in this area, possibly as a condition of soil characteristics, and/or the climate. Unlike *Al-Saata*, in the village of *Omdofais*, the main cash crop is groundnuts, although sesame is also grown in relatively small quantities for home consumption and for the market. Hibiscus and melon seed grow equally well in both villages as secondary cash crops. The marketing of these cash crops vary somewhat with regard to the market destination. Sesame is either traded locally to be sold to the local press mill owners, or shipped to *El-Obeid*, *Bara*, *En-Nuhud*, then beyond to *Omdurman* and other centres, either to be pressed for oil and cake, or exported. Groundnuts and gum Arabic are produced primarily as exportable crops. Hibiscus and melon seed are produced mainly as export crops, although small quantities are consumed at home. In both villages the main food crop grown is millet which is the main staple food crop. *Dura* is grown in small quantities in the very limited alluvial and loam soils which are suitable for its cultivation.

Household farm size averages between 30 - 31 *makhamas* for all crops. There are some differences between the two villages in the allocation of the farm area to the different crops, as the table indicates:

Table 15 Household average farm size and production of the various crops in *Al Saata* and *Omdofais* villages 1991/92

Type of Household	Millet	Dura	Sesame	Groundnuts	Hibiscus	MnSeed
Al-Saata:						
area (MKH)	15	-	10	-	2	3
production	505 (KG)	-	11.9 (MLW)	-	-	160.6 (MLW)
Omdofais:						
area (MKH)	10	-	5	15	1	-
production	210 (KG)	-	33.2 (MLW)	446.6 (MLW)	90.4 (MLW)	67.5 (MLW)
Avr. Market Price (£S)	-	-	80.0	22.0	45.0	24.0

Sources: Field-Work Data 1993;

Production and prices figures are obtained from Care's Survey Report; *El Amin* 1992; pp: 30 - 1.

In *Al-Saata*, the farm area is roughly equally divided between food crops and cash crops, while in *Omdofais*, more land is devoted to cash crop production (68%), and less land for food crops (32%). This reflects that the farmer in *Dar Hamar* is generally more oriented towards cash production than his neighbouring farmer in *Dar Hamid* who is more disposed towards food production. An explanation for this divergence in emphasis in production may be that most of the cash crops are inter-cropped with the *hashab* trees; and considering that most of the productive *hashab* gardens are found in *Dar Hamar*, there is more scope for cash crop production in *Dar Hamar* than in *Dar Hamiid*. Another related factor is that farmers believe that the *hashab* trees attract birds which damage the grains at the most critical stages of their growth, therefore it is safer to grow cash crops with *hashab* trees than food crops..

Productivity: There is no conclusive evidence of a steady secular decline in the productivity of the farm land over the years; as the table below may illustrate. There are, however, marked fluctuations in productivity per unit of land from year to year. These marked annual fluctuations are particularly evident in *Omdofais* (representing *En-Nuhud* area). Productivity for millet for the harvest year 1986/7 is highest, and higher than all preceding and succeeding harvests; the harvest season of 1990/1 recording the lowest productivity. Likewise, productivity of sesame for 1985/6 is higher than the three preceding harvests, but lower than the following one of 1986/7 which recorded the highest productivity, with 1989.90 the lowest for sesame.

Table 16 Productivity for four major crops (food and cash crops) in *Bara* and *En-Nuhud* area, in the period between 1982/3 - 1990/1 (Kgs/*Feddan*)

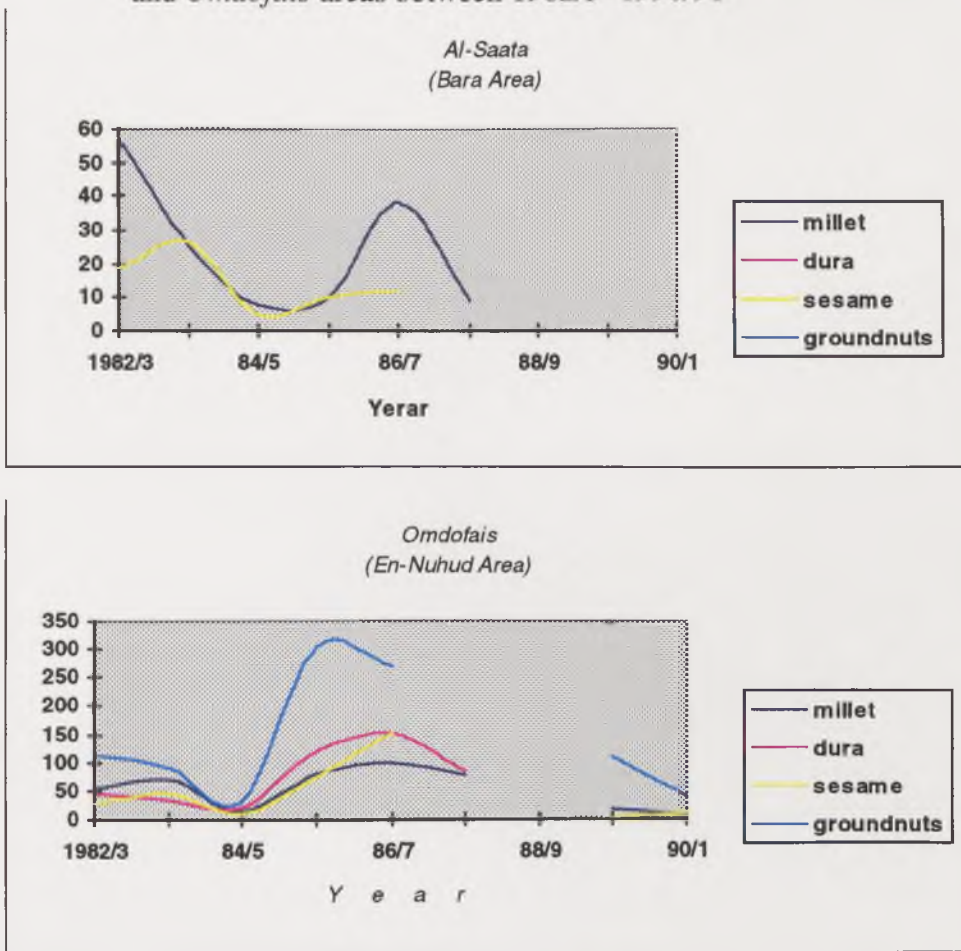
Year	1982/3	83/4	84/5	85/6	86/7	87/8	88/9	89/90	90/1
<i>Al-Saata</i> (<i>Bara Area</i>)									
<i>millet</i>	57.9	25.4	8.1	10.2	38.6	9.1	na	45.7	-
<i>dura</i>	-	-	-	-	-	-	-	-	-
<i>sesame</i>	18.3	26.4	5.1	10.2	12.2	-	-	2.0	-
<i>groundnuts</i>	-	-	-	-	-	-	-	-	-
<i>Omdofais</i> (<i>En-Nuhud Area</i>)									
<i>millet</i>	52.8	72.1	14.2	81.3	97.5	76.2	na	18.3	8.1
<i>dura</i>	44.7	35.6	20.3	121.9	152.4	86.4	-	5.1	11.2
<i>sesame</i>	29.5	45.7	12.2	73.2	152.4	na	na	3.0	12.2
<i>groundnuts</i>	113.8	90.4	30.5	304.8	270.3	-	-	110.7	37.6

Source: calculated from Agricultural Statistics, Regional Ministry of Agriculture, El-Obeid 1993.

The productivity of groundnuts shows very marked fluctuations in the harvest years of 1985/6 and 1986/7 record high levels of productivity, 304.8 Kg and 270.3 Kg per *feddan* respectively; with the year 1984/5 recording the lowest productivity level. On general, there is no clear evidence of a steady secular decline of productivity in

Omdofais (En-Nuhud area). In *Al-Saata* area, on the other hand, a somewhat different picture emerges, which suggests - inconclusively - a trend of declining productivity. Productivity for millet for the harvest year 1989/90 is higher than all other harvests except that of 1982/3. Similarly, productivity for sesame for the harvest of 1986/7 is higher than the two previous harvests; and that of 1983/4 is higher than that of 1982/3, even though 1983/4 is a drought year. Productivity can be more clearly shown graphically in the following illustration:

Figure 6 Fluctuating productivity per *Makhamas* for four major crops in *Al-Saata* and *Omdofais* areas between 1982/3 -1990/91



The picture for the two crops (millet and sesame) does not provide a firm evidence of regular declining productivity. However, with regard to *dura* and groundnuts in *Al-Saata* area of *Dar Hamid*, the area recorded no production, and these two crops seem to have ceased to produce in this area; perhaps reflecting that productivity for these two crops has declined to such low levels that farmers ceased to grow them any longer. This conclusion can only be ascertained by comparing current productivity levels with long term averages; as the table below may illustrate. The figures in the table indicate a steady secular decline in productivity in *Al-Saata* area of *Dar Hamid* for all crops over the long

term. Unfortunately no statistics are available for groundnuts. The following table illustrates these fluctuations in productivity.

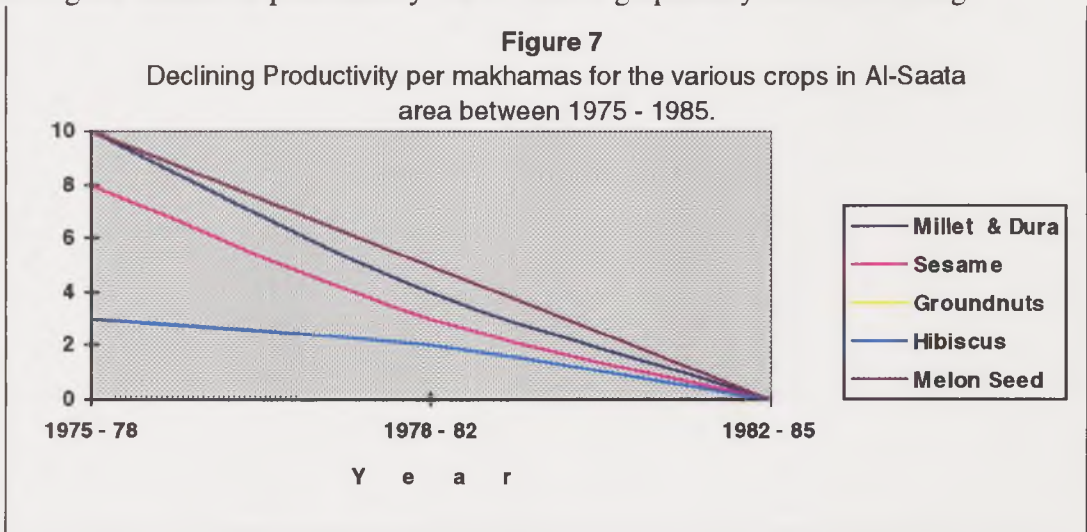
Table 17 Average yield per *Makhamas* for the various crops in *Al-Saata* area in three periods between 1975 - 85: (sack/mkh))

Type of Household	Millet & Dura	Sesame	Groundnuts	Hibiscus	MnSeed
1975 - 78	10	8	na	3	10
1978 - 82	4	3	na	2	5
1982 - 85	-	-	na	-	-

Sources: Regional Ministry of Agriculture, *El-Obeid* 1985.

*NB. no statistics available for *Omdofais* area.

This regular decline in productivity can be shown graphically in the following:



There are no fertilisers used to enhance productivity; and the inability of the village farmers to use fertilisers is a political and economic issue which has little to do with the climate, land or labour. The concern of the state is to provide subsidised fertilisers and pesticides for the wealthy capitalists farmers in the big commercial farms in the *Gedaref* area and along the Nile, but none for the small rural farmer. If this trend of declining productivity in *Al-Saata* is true, it may partly explain the drive towards more horizontal expansion of farm lands as the only alternative open to farmers to increase their agricultural output.

7- 3- Income Sources:

The majority of households derive their incomes from the main activities of agricultural farm labour and animals, which are combined, where many have some animals besides the farm. Trading and government employment come in second place in the village economy for a few members of the village. Many of the village households receive remittances and transfers from migrant members to internal or external labour

markets. Other sources of income include the collection of forest products in the form of charcoal and wood, building poles, forest fruits, ropes made from the barks of certain trees, fencing wood, stalks and straw as building materials, dry fodder. Those members of the village who have camels hire their animals for transport; once a very important means of income generation before the advent of the lorry. Many of the village members earn income from hiring their labour in the village, in fencing, building, farm clearing, collecting dry fodder. Crafts is another source of income. It is clear that the village households derive their incomes from diverse sources; both farm and non-farm. It is misleading to assume that farm work is the sole source of household income in the village. It is difficult to quantify precisely the share these diverse sources contribute to the household income, particularly that most of these activities are performed by the relatively poorer households. El Amin in Care's Programme Area, calculated, in 1991/92, average annual household income to be about S£ 28852 for *Kordofan* as a whole; about S£ 25,546 for *Dar Hamiid (Bara)* area, and about S£ 26,208 for *Dar Hamar (En-Nuhud)* area; of which 82% have been expended on purchasing basic necessities. The Report estimates that on average cash crops contributed about 77% to the household income; 31% for *Bara* area, and as high as 93% in *En-Nuhud* area (El Amin 1992: 6). These figures should be taken with care. In another study (IFPRI 1988) annual per capita income for North *Kordofan* has been found to be about S£ 1100: of which S£ 500 for low-income, and S£ 1866 for high-income groups. With an average household size of about 5 to 7 persons, it is possible to calculate households average annual income to be between S£ 5500 and S£ 7700; of which farm sources contributed about 28% (Tesfaye et al 1988: 47). Average income for low-income households would be between S£ 2500 - S£ 3500; and between S£ 9330 - 13062 for high-income households. El Amin's (Care's) estimates of average household income is almost five times higher than that produced by the IFPRI study. The difficulty of obtaining precise figures for incomes stems partly from the rapidly changing rates in the value of the Sudanese pound as a reflection of spiralling inflation. My calculations in percentage terms according to respondents' assessments in the field-work survey, show different results from the ones just quoted. My results show that the contribution of farm work has declined, and has become the pursuit of the poorer households. That the activities which generate the household income are diverse, and mainly geared towards the labour market. My respondents strongly affirmed that they expend more than they earn, and their expenditure is mainly directed to meet basic subsistence needs of food; between 70% - 90% of the household income goes to purchasing food. They affirm that most of the households are in constant deficit between their income and expenditure which they have to cover by liquidating their productive assets, such as animals and reserves, or sell

out valuables. An unforeseen asset that is also liquidated is the excessive exploitation of forest resources.

7- 3- 1- HOUSEHOLD INCOME CATEGORIES:

The households in the two villages fall roughly in four categories: merchants, government employees, high-income households and low-income households. The categorisation is based on a rough criteria based on the value and structure of the sources which make up the household income, assets and investment, and on the general standard of living of the household as perceived by themselves and by the village members. The following table shows the source and share of income for the 4 types of households:

Table 18 Household categories sources & % share of different sources of income

Source of Income	% Share of Income / Type of Household					
	Merchants (1)	Govn. Emps.(2)	High Income (3)	Low Income (4)		
	%	%	%	%	M	F
1- Farming	-	10	10	25	25	40
2- livestock	40	20	30	-	-	
3- gum Arabic	10	-	10	-		
4- wage labour	-	-	-	50	-50	20
5- trade	50	45	10	-	-	
6- salaried employment	-	25	20	-		
7- handicrafts	-	-	-	-		
8- collected products	-	-	10	20-5	25	30
9- remittances and transfers	-	-	10	-		

Field-Work Data 1993.

The two categories (high- and low-income) comprise ordinary village members, but who are nonetheless differentiated according to their incomes and general standard of living. Income is the main criteria for differentiation for the village households as the villagers themselves regard money to be the most important factor in the village life. The income of each category comes from different sources and activities available in the village economy. There are some nine different avenues, not open to all members equally. Some are traditional sources of income such as animals and gum Arabic, others are new forms not formerly known in the village. Consumption and expenditure patterns have also changed, as also the household labour relations.

From table (18) one observation is the very high percentage share livestock contributes to the income of the first three categories: 40% for merchants, 20% for Government employees, and 30% for the high income category of village households; compared with a low percentage share of farming, which contributes 0%, 10% and 10% respectively. Farming contributes relatively high in the incomes of the category of low-income households (25%). Farming contributes higher to the income of women in this category (40%), than men (25%); making the farming activity the pursuit of the poor and women. Formal government employment (e.g. school teachers) for government employees provides only a quarter of their income, 25%.

7- 4- Vulnerability as a Condition of Economic Differentiation:

Vulnerability is the main cause of famine. Chambers (1989) argues that vulnerability is often used as synonymous with poverty; and defines it in the following terms:

Vulnerability, ... is not the same as poverty. It means not lack or want, but defencelessness, insecurity, and exposure to risk, shocks and stress ... and difficulty in coping with them. Vulnerability has two sides: an external side of risks, shocks, and stress to which an individual or household is subject; and an internal side which is defencelessness, meaning a lack of means to cope without damaging loss (Chambers 1989: 1).

In the light of understanding vulnerability to mean "defencelessness", agriculture, which supposedly is the front line of defence for security of the village households, contributes very low to the incomes of almost all four household categories; with the low income household category recording the highest dependency on agriculture 25% of their income. Perhaps this reflects the unreliability of agriculture and the precarious livelihood situation of households dependent on it. This explains why those households more dependent on agricultural labour are the most poor (low-income) among the village population, and most vulnerable to conditions of stress and droughts. The income of the low-income category derives from three sources, agriculture 25%, wage labour 50% and the balance of 20-25% from collecting products (mostly forest products, i.e. firewood, charcoal, wooden poles, etc.). Their sources of income -reflecting a disadvantaged economic situation- are limited, precarious and environmentally hazardous. They reflect a limited scope of economic opportunities (3 compared to 7 for the high income category) lacking a diversified income resource base, the limits of endowments of the labour power (50%) and the natural resource endowment 45-50%. Their increased reliance on collecting forest products no doubt has serious long-term environmental implications, both for the physical environment and for the viability and sustainability of the natural resource base on which they depend for livelihood. Half of their income derives from hiring their labour power, with the implications that most of their time, effort and labour is hired to work for others in return of cash, which they badly need to pay for daily household basic needs of food, obviously at the expense of

the long-term food security of the household. This clearly makes the low-income category permanently vulnerable, since they have virtually nothing in reserve. They often try and hire their entire labour power for cash to pay off instant needs, leaving them no effort to devote to their own farms, and thus remain in permanent risk and vulnerability. Another view is that even if they reserved some of their labour power to their own farms, the chances of getting a successful harvest are not always promising. There is also a risk involved in agricultural labour, and because of this unreliability and precariousness of agriculture it constituted only 25% of their incomes, although this did also represent the highest share of this group's income. The low-income category of households have fewer sources of income making up their economic resource base. This indexes their degree of poverty. They have no livestock, no gum gardens, no trading, have no skills or crafts, and receive no remittances or transfers from migrant family members. These indicators make the low-income households the least secure, the most vulnerable among the village households. A further distinction can be made within this category between male and female income, with the latter being more towards the bottom line, although receiving more assistance from kin, relatives and fellow women in the village.

For other categories agriculture accounts for only 10% of their incomes, and none at all in the case of the merchant income category, perhaps a reflection of the realisation that agriculture involves much effort and little returns. It has become an unrewarding enterprise, and only the unavoidable choice of the helpless who have no other alternative of livelihood. The first three categories of merchants, government employees and high-income households have their highest stakes in livestock and other enterprises, and engage in agriculture only as a gamble, well aware of its risks. Indeed, the fourth category, rely twice as much on hiring their labour power as on agriculture.

The other three groups are relatively secure, but by no means absolutely secure. Indeed, their degree of security varies from one category to the other. The merchants category is by far the most secure among the village households. In fact, no merchant households have suffered from the recurrent famines. Their security is a condition of the fact that they are the group, who by and large, have relatively large capital outlays which they invest chiefly in livestock and trade. They are thus able to live off the profits they make from the sale of animals and trading activities securely and more comfortably than the rest of the village households. The very high percentage share which livestock contributes to merchant households incomes underlies the fact that as a general rule, merchants own relatively large herds of animals, besides they engage in livestock trade from the available capital outlays. They are the most affluent and secure among the village population. Their security is a condition of their better incomes and relative wealth. The 10% share which gum Arabic contributes to the incomes of merchant

households comes mostly from profits realised from gum Arabic trading, although some merchants do have some gum gardens. It is possible therefore to subsume the gum Arabic under trade, though with a difference, which makes their trading activities account for 60% of their total incomes. The major source of income for the category of government employees derives from trading mainly in animals which contribute a high of 45%, and another 10% share coming from agriculture. Interestingly, government salaries which this category- like the village school teachers- get contribute only 25% to their incomes, far below any security threshold. This share is in fact steadily declining in real value with rising inflation. Government employment provides no security for households who are entirely dependent on it. However, salaried employment have the advantage of contributing a regular source of income, however small. Government employees often forsake their jobs if they find better alternatives of income generation, either in livestock trade or migration, especially to the Arab world. The low and declining share of government employment to this category of households makes this group the second most vulnerable group of households. To a large extent, their perceived security lies in their ability to own relatively good numbers of animals. This is not a general rule, since not all government employees own animals as the most significant component of their income. The high percentage share of 65% may well have been a case in the village where Government employees (in this case village school teachers) have been investigated, and may be relevant to a certain proportion of such employees.

The third category of households, that of the high-income village households, is more secure than Government employees. This group's security is a reflection of their ability to rely on a diversified economic base as manifested in the highest number of sources of income composed of a set of seven different sources out of the total nine avenues. However, an important qualification needs to be made here of the term '*high-income*' used to designate this category of households. The term should be understood in '*relative*' terms in comparison with the other category of ordinary village households excluding merchants. The absence from this group's economic basket of wage income indicates their relative advantaged economic position in that they not only preserve their labour power for their own enterprise, but are themselves frequent employers of hired labour. This clearly suggests that they have both the enterprise large enough to demand additional labour power, and the means sufficient to meet the additional labour demand. This puts them on a par with the category of merchants in terms of enterprise and financial means. This position also explains why, in terms of economic ability, members of this category can easily switch to invest their means in trade as petty village traders if they so wished under favourable conditions.

This category is perhaps better placed than that of the merchant households in two important respects. The first and most obvious relates to the higher number of sources of their economic base, seven compared to three for merchants. The second relates to the contribution livestock makes to this category's income. Livestock contributes 30% to the incomes of this category of households, apparently less than half that of merchant households. However, this discrepancy in the share of livestock contribution can be better understood if it is recognised that merchants invest a considerable part of their capital in livestock trade, and therefore, the relatively high share of livestock to their incomes accrues partly from the profits they realise from this trade. In other words, for the merchant group, livestock contribution to their incomes involves a necessary recycling of investable capital. For the other category, livestock contribution to their incomes does not involve such recycling of capital, but that this share comes exclusively from their own herds of animals involving no trade activities. They thus become insulated from the uncertainties of the livestock trade, either domestic or foreign, such as makes their incomes relatively more stable and more secure.

The second important indicator is that this group also engages in some trading, signifying that they have some capital outlays to invest in trade, though less than merchants, but an added advantage over the other two category's of employees and other villagers. Another important indicator which they share with government employees is that some of them have a small proportion of regular income from salaried employment, though this source, which is mostly a government payment, is usually very small and is confined to only a few individuals, as for example market guards, local clerks and workers in the village schools. Another indicator for this group's income and of particular significance is that they have 10% or more of their income coming from gum Arabic collection, indicating that this is the group who own the major part of the *hashab* gardens. However, this category of household have about 10% of their incomes coming from remittances and transfers from migrant family members, mostly as immigrants in the rich Arab States, or from members working in Central Sudan, either as government employees or as wage labourers. By far the most important are those remittances and transfers coming from immigrants to the Arab States. This outer migration has assumed a social phenomenon of significant importance and impact on the socio-economic situation of the local economy. To a large extent this migration has become vital for the livelihood of many households. Many households in the village have had at least one member who immigrated to the Arab States at one stage or another; and that those households who have not had a migrant member are among the vulnerable of all village households.

The high-income households have a good share of their incomes coming from remittances. This may also indicate that they also have better education among its

members, that enables them to migrate and find better jobs and better incomes inside and outside the country, away from agricultural labour. This implies that better education for members of village households would have not only the immediate benefits contributing to the household income and better livelihood, but has the added long-term advantage of relieving the pressure on the land as increasingly educated members of the population seek better opportunities outside the local economy.

There is a preponderance of new sources of income previously unknown in the local economy. These more conspicuously, are the emergence of the increasing dependence on wage labour as a source of income, the expansion of trade, salaried employment, increasing resort to the collection of products (mainly forest products) and the increasingly significant role of remittances and transfers from migrant labour, reflecting the volume and significance of out migration. These new avenues of income are assuming an increasingly significant role in the rural economy. All of these new avenues of income involve forms of monetised labour relations enmeshed more or less in the labour market relations, e.g. in wage labour, trade, collected products, remittances and transfers from migrant labour. The totality of these sources reflects a differentiated market economy that is emerging in the rural production relations. This has relevance to issues of resource management and control.

The significance of the observations made above and their relevance to security as far as it is a condition of resource management and control, is that these new avenues and sources of income represent forms of alienation of resources, especially in labour, away from the immediate control of the local users and away from its traditional uses towards more monetised market relations. Consequently, the local people lose as a result of the extraction from their labour power to the benefit of employers, including the state as an active agent. The alienation of resources in forms of labour and manifested in these new sources of income stand in contrast to the traditional sources of income, in agriculture, livestock, and gum Arabic collection; control over which resources remained in the hands of their local users, although increasingly subject to the imperatives of the market forces in terms of prices. The conclusion that can be drawn as far as resource management and security are concerned is that rural resources used to be under the direct control of their legitimate owners and users. Recently, the increased dependency on the market, has changed the consumption patterns and caused shifts in the satisfaction of needs from local to outside sources. This has entailed lasting changes in the household expenditure regimes.

7- 5- The Household Expenditure:

We roughly identify about ten fields of expenditure. Expenditure on food has recently become the single most important need claiming over 70% of the household

budget. Table (19) below illustrates the changes that have occurred over the years in the composition and share of household expenditure, and shows that household expenditure has increased on five fields, remained the same on two, and decreased on three. Food and other consumer goods claim the major part of the household budget. The other remaining household needs are either to cut down on the expenditure of food in terms of quality and quantity in order to satisfy such needs, or do without them altogether. The wide unbridgeable gap between needs and means can be explained in terms of the extremely low returns from rural labour, the value of which is far less than the basic needs of its reproduction requirements.

Table 19 Changes in the household expenditure

Field of Expenditure	Share in Expenditure		
	<i>more</i>	<i>same</i>	<i>less</i>
1- on food	✓		
2- reproductive capital = investment			✓
3- on weddings	✓		
4- on clothes	✓		
5- on other consumer goods	✓		
6- gifts and social occasions			✓
7- on schooling		✓	
8- on recreation			✓
9- on housing		✓	
10- on medicines	✓		

Field-Work Data 1993.

The result is extremely low standards of living, and poverty which makes the rural populations extremely vulnerable to shocks, either of the environment or the market conditions which precipitate famine.

The generally low standards of living can be gleaned from the table. Weddings have become prohibitively expensive since the entire preparations of the wedding have to be purchased from the market, while in the past the entire lot of such preparations are met from within the household with very little from outside. At present, prospective adult males in the age of marriage can spend several years work, or may need to migrate in order to prepare for their weddings. The real problem is how to fend for the new family. As can be expected more often households of newly married couples end up worse than when they started. Expenditure on clothing increased dramatically over the years, and more recently clothes have become prohibitively expensive, and because, anyway, people have very little to spare for clothing, many poorer households find it very

difficult to clothe their members decently. Had it not been for social values which obligate migrant members and kins to support poorer relatives, and the positive contribution of such migration in offsetting their dire need of the poorer members of the village community, many would not have been able to clothe decently.

Expenditure on housing and schooling remain the same. This reflects neither improvement nor worsening since there has been no expenditure involved in these needs. Each household has their own house built from local materials. Education has been catered for by the state as a public service. However, more recently since the late 1980's schooling for children has become another strain on the meagre household budget in terms of children's school needs, contributions of money to the school, and of food since in these last years the state has been unable to provide free food for the school boarding pupils, and parents have to provide for their children's food. Under such circumstances, children from poorer households have been withdrawn from school to help the family with agriculture or livestock. For the poorer households it is economic causes which impel them to withdraw their children from schools, for some of the able households it is to do with what they regard as the "futility of education": that it provides neither security nor a living for the growing person. Living experience in Sudan has taught parents that education provides no security of life, as they can see that many educated people end up joining the ranks of the poor (as with the village teachers), the unemployed, or migrate to outside countries. They argue that it is safe for considerations of future security to train the young person from an early age in a certain trade or skill, and to enable him/her to adapt to the local conditions than to seek security of employment in education and expectations which may never be fulfilled. In the final analysis, the rural populations have become part of a larger proletariat with very little prospects of life even with good education, they cannot hope for permanent security.

Expenditure on recreation and social occasions became far less than it used to be in the past. Social events are much reduced in length and frequency, have worn out of warmth and cheer, and become mere forms of social obligations, with nothing of the past happiness and joy invested in them. Prolonged wedding days of friends and relatives, merry drinking parties, female gathering occasions have all become stories of the past. Many people, when asked how they see social life today, complained that the people have become more busy with their own affairs, have no time to care for others, have become more distracted such as a friend you may not have seen for a long time would pass you hurriedly without greeting '*el-Salamu Alykum*' as if you have been with him the other night. People have become greedy and selfish. Times have changed and people have changed too. These '*honest*' words tell a lot about the stresses and the marks that are tainting rural social relations. Not surprisingly, many of the old social obligations and the ties that bound the social fabric are laxing under the stresses of the

new conditions. The hardships of life under the new conditions are creating a new pattern of survival which can be termed '*individual survival*' as opposed to the old '*communal survival*' when stronger social ties favoured communal sharing of opportunities and needs. A pattern of individualism is emerging in rural social life as against the old one of communalism. However, a marked difference in the '*quality of life*' can be seen. Present day social life is much harder and offers far less happiness than it used to be with older generations. People are now becoming primarily preoccupied with their basic survival, and the major part of their time is devoted to the attainment of the more basic means of survival; food.

From the foregoing discussion, it is possible to infer some important conclusions about the causes of the famine which has hit *Dar Hamid* and *Dar Hamar* in 1983/5 and again in 1990/91. Considering the natural resource base of the village communities, there is no shortage of resources in terms of land, animals or labour power. Indeed, there is abundance of land for every person to farm; and there is plenty of grazing for the animals to graze. The majority of households own at least a few animals. There are considerable gum forests to collect gum. There is no lack of production and, although productivity is low, there is no conclusive evidence of a steady decline in productivity as we have seen from the foregoing discussion. The village population put their labour power not only to produce for themselves, but also to produce for the market by engaging in the local and external wage markets. In terms of natural resource endowments, therefore, the local village communities have enough resources to support them. In spite of the availability of resources, the village communities in *Dar Hamid* and *Dar Hamar* suffered repeated famines in 1983/5 and in 1990/91. Why famine persists in this region in spite of availability of resources, is the result of complex factors. Before considering these factors, it is important to establish a conceptual understanding of what famine really means.

7- 6- The Famine Crisis:

Famine is only the ultimate manifestation of acute vulnerability, caused not so much by lack of resources as by long term processes of marginalisation, exploitation and underdevelopment of the rural village communities in the context of the socio-political set-up of the Sudanese state and the structures of power within it. Famine is a crisis in society. It marks the breakdown of normal relationships and livelihoods in society. Famine is final and terminal; and has its roots in the long-term processes which brought about the economic and environmental disaster. As a crisis, it can be defined that:

It has connotations of systemic breakdown, but more generally it can refer to a moment or a specific time period in the history of a systemic which various developments of a negative character combine to generate a serious threat to its survival (Lawrence 1988: 2).

Famine therefore has to be understood as a crisis of long process that is firmly rooted in the politics of the state. One of the best definitions of famine describing its processual long-term socio-economic character is provided by Walkers (1989):

famine is a socio-economic process which causes the accelerated destitution of the most vulnerable , marginal and least powerful groups in a community, to a point where they can no longer, as a group, maintain a sustainable livelihood (cited in Devereux 1993: 181).

The local people see famine as a problem of destitution and incapacity, not just one of physical hunger and starvation. And that famine is a continuation of normal processes of lack and want leading to vulnerability, not a unique singular event. In the light of such an understanding, it is not possible to isolate the causes from the processes. Nor is it possible to isolate the famine as an "event" and locate it in a specific time and space. As a process, famine builds up over a long period of time, in a wide enough area involving many communities simultaneously. The reader of this study will not find an account of a "famine event" that is specific in time and space. The following account will follow the processual build up of the famine crisis.

7- 6- 1- *The Genesis of the Crisis:*

The severe droughts that have devastated *Kordofan* countryside (including *Dar Hamiid* and *Dar Hamar*) in the mid-1980s and in early 1990s, have only brought long-term processes of impoverishment and vulnerability to their logical conclusion (George 1991; Bush 1986, 1988; Arnold 1988; Shepherd 1988; Watts 1983, 1987, 1991; Cater 1986). These processes (as described in chapters 3-6); involved long-term political marginalisation and economic exploitation which have ultimately rendered the rural communities extremely vulnerable to natural shocks. The natural resource base on which the local population depend for livelihood, have been unwisely mined and the proceeds of rural labour therefrom appropriated by the extortionate policies of the state; and by the collusive practices of a greedy exploitative merchant class. Behind them all, stand the mighty power of international interests relentlessly pushing the expansion of the market forces. Shepherd identifies the problem as having two facets: one is the inability of most farmers or livestock owners to retain a surplus - due to market conditions, low farm gate prices, and high interest rates, due to the prevailing low level of technology, and due to the absence of an effective transport infrastructure. The other face is the absence of tried-and-tested technologies of land improvement in which farmers could invest if they had a surplus. The implication of the lack of savings and surplus accumulation for local food security is that the balance is tilted towards selling out and away from storing what was not needed for consumption. Shepherd concludes that "this is the core of the underdevelopment of peasant areas" (Shepherd 1988: 61). This indeed is the core of the problems of poverty and famine in *Kordofan* rural areas.

7- 6- 2- The Process of Famine:

7- 6- 2- i- The Drought:

The signs of a gathering crisis have been clearly evident in *Kordofan* countryside many years before the drought.; portending of an imminent disaster in the making. The local communities relate that they have started feeling the stress conditions since about 1979/80 followed by a succession of poor harvests since 1980 onwards. And when the drought year of 1983/4 finally came, they were already stripped off of almost all means of protection to cushion them from the shock. They were already fully exposed. It is instructive to explore what actually happened during the drought, and how it turned the long-standing rural vulnerability into a human disaster of biblical proportions. The droughts of 1983 -85, and of 1990/91 have been particularly intense (Hulme 1991a, 1991b). There has been a crisis building up in the rural areas for many years before the drought, which when it finally came, turned the already long-standing vulnerability of the rural populations into a disaster of colossal proportions. Droughts are part of the climatic fluctuations characteristic of the semi-arid environment in this region, which the local people have adapted to and coped with for centuries aided by various mechanisms of adaptations (see Chapters. 3-5). However, the fact that the local inhabitants have not been able to cope with recent droughts has less to do with the natural phenomenon itself, and more to do with long-term social and economic trends. These weakened long-established indigenous mechanisms of coping with droughts, thus rendering the local inhabitants more vulnerable to conditions of stress.

It is also true that the 1983/5 and 1990/91 droughts have been exceptionally intense and affected the entire rural communities in wide areas all simultaneously. Dry conditions set in in the region since about 1979, manifested in declining rainfall trends which translated in poor harvests during these years. Hulme (1984) concludes on the bases of observed rainfall data in Sudan's arid zones during this century that the years from 1979 - 83 were as dry as the years 1969 - 73, and that the year 1984 remains the driest on record. Yet the fact that the local people managed to escape the 1970s drought without the development of a famine corroborates to the view that a drought by itself is not a sufficient cause for famine. But the drought lowered crop production.

7- 6- 2- ii- Poor Harvests:

Local people have indicated that the years since 1980 have been of poor harvests associated with declining rainfall trends. Agricultural production has been on the decline during the drought years since 1980. The harvests of 1984/5 and of 1990/91 have been the lowest on record. The two main food crops, i.e. millet and sorghum and the major cash crops i.e. sesame and groundnuts were at their lowest. The poor harvests were mainly attributed to the occurrence of prolonged dry spells (*sabnah*), and fewer rainy

days in the main rainy season in June to September. The low levels of food production during the drought years forced people to liquidate their basic assets, namely animals, and valuables, in order to procure food from the market. For those households who had neither, migration remained their only option. Food grains became the single most important item of trade in the local economy. Here the market forces were turned against them. The following table shows the levels of production in *En-Nuhud* and *Bara* area for the major crops.

Table 20 Production of the different crops in *En-Nuhud* and *Bara* area 1982/3 1990/91 (in Kgs).

Crop/ Area	1982/3	1983/4	1984/5	1985/6	1986/7	1987/8	1988/9	1989/90	1990/1
<i>En-Nuhud Area</i>									
<i>millet</i>	33604	54062	24957	91891	79078	33684	-	24045	2440
<i>sorghum</i>	11688	8563	2986	9217	11870	1978	-	500	57
<i>groundnuts</i>	59283	41328	10980	41848	49100	+	+	5344	4849
<i>sesame</i>	3410	4415	1586	9110	11870	+	+	434	398
<i>Bara Area</i>									
<i>millet</i>	16830	6720	1960	3316	9122	1550	-	28498	-
<i>sorghum</i>	-	-	-	-	-	-	-	-	-
<i>groundnuts</i>	-	-	-	-	+	+	+	-	-
<i>sesame</i>	3230	4748	750	1468	1065	-	-	295	-

Source: Regional Ministry of Agriculture, *El-Obeid*, Statistics Office 1993.

7- 6- 2- iii- Market Failure:

Long before the drought, signs of stress on a large scale were already evident in the villages (Cater 1986; Bush 1985, 1986; Dreze and Sen 1989; Cutler 1991). A general collapse of people's purchasing power has come about as the final culmination of a long process of impoverisation due to consistently dwindling returns from the sale of agricultural produce, and the very low prices offered. Households have been experiencing continuing hardships in their daily living conditions. Resort to the collection of forest products has intensified particularly dramatically during this period in an attempt to recoup part of the loss from the main economic activities i.e. agricultural labour, and animal husbandry. As Shepherd has observed, extraction of value "from the soil" can become their only option short of migration, or combined with it, in order to maintain customary standards of living (Shepherd 1988).

The village households became permanently trapped in a vicious circle of exploitation and poverty such that they were not able to accumulate. The only form of assets some of them had, was in the form of animals, and these proved to offer poor protection against famines during times of crises. Otherwise, they have the land and their labour power to exploit. But these in turn proved to be of little value to them in the drought years when the land yielded very little and there were no alternative

employment avenues to utilise their labour power in the shrinking rural labour market. The returns from the land were poor, and even here, the major part of the value of their agricultural labour is being appropriated by the state and the merchant class through the mechanisms of the market; leaving them with less than 30% of the actual cost involved in their labour reproduction (Oesterdichoff 1980). On the other hand, employment opportunities other than tilling the land were negligible, or non-existent, either in the local economy or in the weak national labour market. But the rapidly deteriorating rural terms of trade was the worst aspect of the market failure during the crisis. Other indicators as the stress worsened included the reverse ratio between falling animal prices vis-à-vis rising food prices. The prices of animals plummeted decimally as the prices of food rose very rapidly. The need for food grains forced the populations to sell out in distress more and more of their animals. The large supply of animals caused a glut in the market and prices collapse, falling to less than a tenth the normal. Intervention from the state to support the peoples' purchasing power by stabilising prices, could have gone a long way towards sustaining their livelihoods and reserved part of their assets.

7- 6- 2- iv- *Rural Terms of Trade:*

Rural terms of trade steadily deteriorated during the crisis which precipitated the already long-existing poverty and vulnerability of households. While the prices the local producers receive for their agricultural produce and livestock were steadily declining in real value, prices that they had to pay for their consumption needs, including food, were steadily rising over the years. The prices of the major cash-crops apparently show a steady increase during the period except for a few fluctuations in the prices of groundnuts and hibiscus. However, this seemingly regular price increase disguises the fact that the prices of these products declined in real value over the years; such that farmers receive far less than the minimum market price. The following table shows the market prices of the major agricultural produce at *El-Obeid* produce market.

Product	PRICE							
	1984/5	85/86	86/87	87/88	88/89	89/90	90/91	91/92
Sesame	617	839	697	907	2074	2692	7051	16630
Groundnuts	401	640	533	734	890	203	5820	10221
Melon Seed	708	652	468	454	718	1230	3382	7337
Hepiscus	599	2508	1829	1605	2060	5410	4112	8070
Gum Arabic	632	1032	2743	3889	4075	4421	4572	9427

Source: *Regional Agricultural Statistics, El-Obeid Produce Market; El-Obeid 1993.*

. As local supplies of food became exhausted food grains had to be procured from the regional markets, which were controlled by a cartel of grain merchants linked in the business of the grain trade to powerful national interests of the commercial capitalist farmers. The dependency of the local populations on external sources of food supply through the market renders them extremely vulnerable to price fluctuations, such that they are placed in a very disadvantaged position, and during years of droughts, food prices reach up to ten or 30 times their normal levels; and become totally inaccessible to the majority of the local consumers and practically beyond the reach of their economic means. The following table shows the prices of the main food staples (*Dura* and Millet) over the same period:

Table 22 Prices of the Two Main Staple Food Crops Over Same Period (in S£s/ Ardeb)								
Years	1984/5	85/86	86/87	87/88	88/89	89/90	90/91	91/92
Sorghum	2365	1364	1086	1523	2449	4398	27239	23467
Millet	2640	1407	1199	2903	2668	5709	349559	28750

Source: *Regional Agricultural Statistics, El-Obeid Produce Market; El-Obeid 1993.*

The following table illustrates the adverse terms of trade between cash crops and food grains in the market.

Table 23 Prices of Groundnuts and Gum Arabic as % of Sorghum and Millet Prices								
Cash crop % Food crop	(PRICE)							
Years	1984/5	1985/6	1986/7	1987/88	1988/9	1989/90	1990/91	1991/2
Groundnuts % of Sorghum	17	46.9	49.1	48.2	36.3	4.6	21.4	43.6
Gum Arabic % of Millet	23.9	73.3	228.8	134	152.7	77.4	01.3	32.9

Source: *Regional Agricultural Statistics, El-Obeid Produce Market; El-Obeid 1993.*

Terms of trade are dismally lagging in pace with the rocketing inflation rates of the national economy which shows inflation rates estimated at 3000% between the 1970's and 1990's. The apparent increase is only nominal disguising the huge decrease in real value of rural produce. The negative terms of trade, as a consequence of low returns from agricultural produce vis-à-vis the highly inflated market prices of consumer goods, is the single most important factor underlying rural poverty. It is not surprising therefore, to find that an average village household would require one Kantar of groundnuts to pay for the price of only about one kilogram of sugar, sufficient to meet the households sugar consumption for only two days in 1990. In 1992, a gum collector

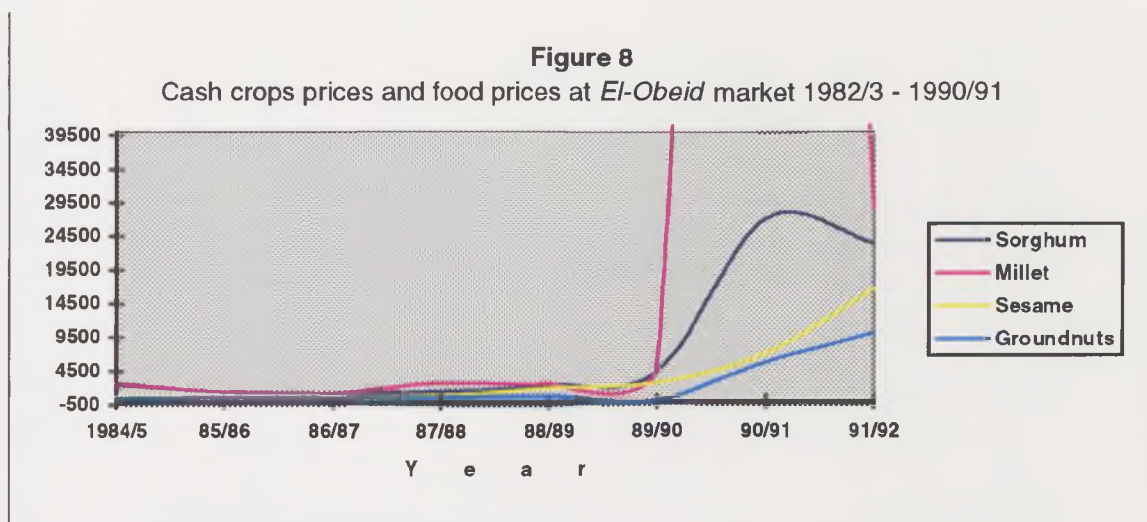
would require at least half a *Kantar* of gum, about a fifth of his entire harvest to buy a single garment of manufactured cloth fabric.

Bad terms of trade between cash crop prices and food prices is another critical factor in determining household food security situation. Food grains have become a market commodity of strategic importance since it has entered the market also as a cash crop in its own right. *Kordofan*, especially the northern semi-desert parts, has been a food deficit region, in nearly six out of ten harvests these semi-arid regions would experience food deficit. Therefore, grain has entered the market, exclusively in the control of powerful regional grain traders (as we have seen earlier) who have the capital, the storage and transport facilities to import and horde large quantities of grain mostly from the Central Sudan and from *Habila* mechanised schemes. These regional grain merchants, mostly stationed at *El-Obeid* grain market centre, form a powerful cartel, and among themselves manipulate the grain prices in the whole region entirely for their own gains enabling them to horde grains and increase prices, especially in famine years.

The negative terms of trade between cash crop and food worsens particularly badly during famine years. As can be seen from the table, in 1984/5, the price of groundnuts was S£ 401 for the *Kantar*, while the price of one *Ardeb* (2 sacks) of sorghum is 2365 and 2640 for millet. Thus an average village household would require about six *Kantars* of groundnuts (possibly the whole years harvest) to procure only one *Ardeb* of sorghum (or six and a half *Kantars* for one *Ardeb* of millet) sufficient to meet the households grain requirements for about forty days. The deterioration between the rural terms of trade is far worse in the second famine of 1989-91. In 1989/90 the average village household needed as much as 21.5 *Kantar* of groundnuts to buy only one *Ardeb* of sorghum, and as much as 28 *Kantar* for the same quantity of millet. The negative terms of trade can be more clearly shown graphically in the following illustration:

Years	1984/5	85/86	86/87	87/88	88/89	89/90	90/91	91/92
Sorghum	2365	1364	1086	1523	2449	4398	27239	23467
Millet	2640	1407	1199	2903	2668	5709	349559	28750
Sesame	617	839	697	907	2074	2692	7051	16630
Groundnuts	401	640	533	734	890	203	5820	10221

Source: Field-work Data 1993.



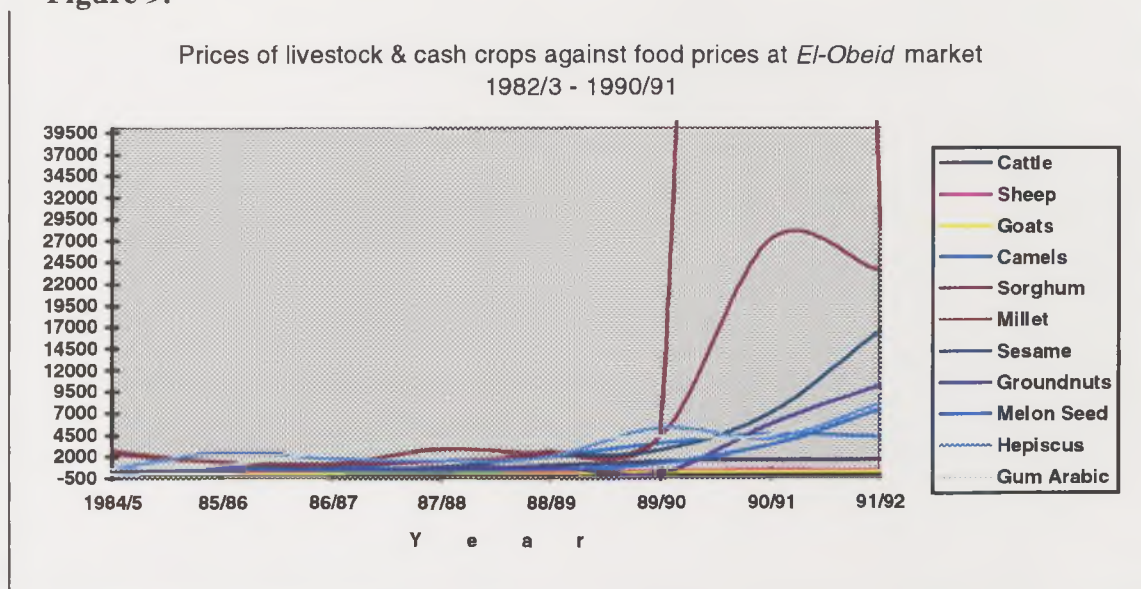
Not only that the rural populations are being disadvantaged in terms of trade between the prices they receive on their agricultural cash produce and the prices they will have to pay for their consumption needs, including food, but also terms of trade for livestock show similar negative trends. The following table shows the prices of livestock at *El-Obeid* livestock market in the years 1984-92.

Type of Animal	PRICES							
Years	1984/5	85/86	86/87	87/88	88/89	89/90	90/91	91/92
<i>Cattle</i>	106	485	482	604	1097	1453	1703	1705
<i>Sheep</i>	43	148	167	185	296	338	564	426
<i>Goats</i>	15	72	70	125	133	182	282	269
<i>Camels</i>	346	725	840	1621	2169	3575	4602	4351

Calculated from Kordofan Regional Ministry of Agriculture, Statistics Office - El-Obeid 1993.

The prices of animals show precipitous decline and utter collapse in famine years in relation to food prices. A quick look at animal prices in relation to food prices reveals the extent of collapse of the rural terms of trade and the concomitant collapse of purchasing power of the village households. The prices quoted above are those prevailing at *El-Obeid* main regional market (for lack of statistical records in the villages), which suggests that actual producer prices in the villages are lower still. Therefore, while the actual producers receive lower prices for their animals, they pay damagingly higher prices for the food grains that reach the villages. A pastoral family would need over six heads of sheep to obtain only one *Melwa* of *dura*; or a complete herd of about 196 heads of sheep to buy one sack (thirty *Melwas*) of *dura*. This can be more clearly shown graphically in the following illustration:

Figure 9:



Famine represents an instance of dispossession of the poor. It is a paradoxical situation in which occurs a transfer of wealth from the poor to the rich. Accordingly, in the famine of 1983/5, the average price of cattle was S£106, S£43 for sheep and £15 for goats. In comparison the prices for one *Ardeb* (2 sacks) of Sorghum was S£2365, and Millet S£2640. Evidently the terms of trade were far beyond any comparison, and as a result, a village household would require a complete herd of 25 cattle or of 61 sheep to buy only one *Ardeb* of Millet. And in the famine year of 1990/91, the animals needed to procure the same amount of Millet were 21 heads of cattle or 62 heads of sheep. Obviously this is one of the most glaring examples of the market distortion and failure. The lot of the rural poor is that they have been brought under the power of the market machine; a complex market machine for which the local people are totally unequipped to cope with its unequal exchange mechanisms. This particular context provides us with a most illuminating example in which the market forces bear overwhelmingly over a rural system of production, with deep-reaching, and in this context, disastrous effects.

Formerly, before food had been incorporated into the market system, food grains used to be secured collectively for the whole village, brought on camels from neighbouring areas, either by sale or borrowing. Local food security was very much a matter of food resource control, entirely within the hands of the village people. With the commercialisation of food into the market, trade has now developed peculiar and exploitative forms, entirely in the hands of outsiders, such as the *Jellaba* and other merchants. Grain has become an important item of trade in its own right, conducted in a separate circuit of monopolistic trade, entirely in the control of the grain merchants. These grain merchants import food grains from other parts, especially from *Kosti* on the White Nile and from *Habila* commercial mechanised farms in Southern *Kordofan*. The grain merchants form a powerful cartel and among a handful of them exercise complete

monopolistic control over the transport, marketing and distribution of food grains region-wide through to village traders. The village traders represent the last knob in the mercantile chain, collecting the village produce for the market, and distributing merchant goods to the village people, including food.

The merchants monopolistic control over the grain trade as suppliers of food, and over other aspects of the commodity market breed exorbitantly taxing pricing systems for all commodities, especially in a situation of permanent scarcity as in the case of Sudan's weak economy. And in such a situation, it is not infrequent that scarcities can be artificially created by certain powerful interest lobbies and by some illicit practices such as hoarding. Consequently prices soar sky high in a spiralling manner which systematically depletes rural people's economic resources, reserves and assets. Ultimately the rural populations are rendered to absolute poverty, vulnerability and famine. The great irony about famine is that it provides an instance of great upheaval and shaking, whilst at the same time it is a time of feast for the merchants when they reap vast wealth. It has been reported in *Bara* that a merchant of the town (an example of many others) was able to accumulate pounds of gold during the famine in 1990/91 which he collected from the stressed pastoralists and villagers, which represented their last store of valuables in exchange for small sums of cash or grain in the famine years.

It remains to be answered whether the development of the 1980's famine in *Kordofan* and Western Sudan was an artificial creation of powerful lobbies, including the grain merchants lobby. Allegations have repeatedly been made pointing the guilt to the Islamic banking system, especially the Faisal Islamic Bank (FIB) that it had bought and hoarded the entire grain harvest in 1984/5, caused prices to soar and contributed to the famine, but reaped enormous profits. Indeed, *Nimeiri* was in alliance with the Islamicists at the time in a bid to promote Islamic laws. When they fell out of favour, *Nimeiri* accused them of having exploited the Islamic banking system to enrich their members and to undermine the economy. Thus, the Islamicists fell from President *Nimeiri*'s favour and some of their members were put in prison, including their leader, Hassan El Turabi. However the end result is the damaging effects on the food situation in *Kordofan* and Western Sudan, exacerbated an already bad food shortage and ultimately led to the famine. One of the consequences of the 1983/85 famine was that it fed into the general popular protest and the popular uprising which finally overthrew *Nimeiri* in April 1985, at the height of the famine.

The process of famine involves the gradual build-up of its causes over a long period of time. From the above account, we can identify two kinds of causality: long-term tendencies which render the rural populations vulnerable to famine, and short-term adversities which act as trigger factors and bring long-term tendencies into famine. This latter group of trigger causes include the drought, which in turn leads to poor harvests,

market failure and associated bad rural terms of trade in which the rural populations fail in the market to have effective command for food. The list of adversities against the rural people is overwhelming, extending from long-term processes of political marginalisation and economic exploitation creating patterns of chronic impoverishment and vulnerability; to natural shocks and market failure. The rural people, however, did not capitulate fatefully to the adversities against them. Instead, they coped with these adversities in many different ways, aided by long-established survival strategies and adjustments which helped them survive the disaster.

7- 7- Patterns of Movements Induced by the Stress:

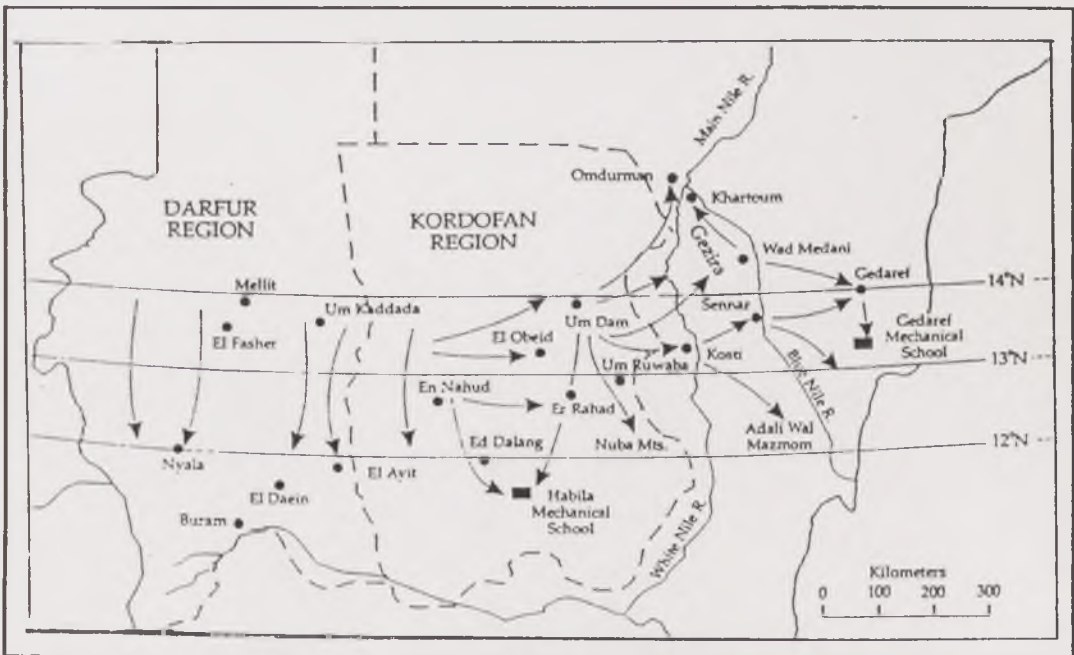
The people responded to the prolonged conditions of stress by large scale movements. Two distinct patterns of stress-induced movements can be discerned. One occurring among the pastoralists from the Northern parts of the region towards the South. Population densities increased among the settled village communities and around permanent sources of water, as increasing numbers of the pastoral communities moved south and many of them settled among the village populations or set up their own villages in the areas where they moved to. Another movement occurred among the settled village communities who in turn migrated to the urban centres and abroad; mainly to the labour markets in the Arab States.

The pastoral communities in *Kordofan* represent about 24% of the total number of *Kordofan* population which is estimated to be about 3,240,700 people according to the 1983 census. Among the pastoralists literacy rate is only 3%, and apart from their main economic preoccupation i.e. animal husbandry, have very little skills to help them find alternative avenues of employment in the regional or national economy. Under the conditions of acute prolonged stress, the only option available to them is to move Southwards and settle among the sedentary village communities; especially in *Dar Hamar* and parts of *Dar Hamiid*. Such settlements among the neighbouring communities have the adverse consequence of increasing the population and animal densities, therefore exerting more pressure on the already exhausted land. The pastoralists who have been forced into this Southernly movement are preponderantly composed of women, children, and the elderly, together with what have survived the drought of the small stock of animals. The young adult males migrated to other places seeking work; especially to the cities of *Omdurman*, *Kosti*, and *El-Obeid*, where, unfortunately, owing to their lack of skills and unfamiliarity with urban life, they end up joining the ranks of the urban poor congregating in the shanty towns and slums surrounding the cities. Another large movement occurred amongst the village settled communities who in turn migrated towards the towns and urban centres. This type of movement has a pattern of some distinct demographic characteristics. It engage the

young adult males of the villages who see no prospects of staying in the villages. They migrate to the regional towns of *El-Obeid*, *En-Nuhud*, *Um-Ruwaba* in *Kordofan*; and many more find their way to the Capital, to *Omdurman*, and others to the schemes in central Sudan. They leave behind the women, the children and the old. The resultant imbalance in the demographic structure can be clearly noticed in the villages during such times of stress.

Although rural population movements from areas of dearth to better food-secure areas is an established feature of life in *Kordofan* countryside, what is new in the present circumstances is that such movements have turned into forced displacement involving whole families, instead of being voluntarily undertaken by young adult males which characterised movements in the past. Under the present conditions, we find that whole families are forced to flee their villages and seek refuge in the relief camps, or else join the slums in the shanty towns in the main cities under squalid conditions. In *El-Obeid* camp in 1984/5, displaced family size averaged between 4 - 7 persons. They are provided with 1 1/2 *Melwa* of *dura* (one *Melwa* = approx. 7 pounds; or 3.2 Kg), 1/2 a pound of cooking oil, and 1/2 a pound of onions. This is a three-day ration (Ibrahim M. 1985). The poor diet led to malnutrition, which in turn led to poor health conditions and the spread of diseases in the camps, which are largely responsible for the elevated mortality rates, especially among children. The trends of rural movements during the famine can be illustrated as follows:

Figure 10 Trends of movements induced by the stress



Source: Ibrahim, M. B. 1985, quoted in IFPRI Report 88; Tesfaye et al 1991; p: 37.

However, the most clear manifestation of the stress, is the large-scale exodus of rural/external migration to the Arab States. As we have shown in the previous chapters, this external migration to the Arab labour markets came as a response to the realisation that the domestic national labour market offered the stressed migrants neither opportunities for work, nor reward on their labour in order to induce them to work inside the country. :

7- 8- Migration:

Migration remains the single most important indicator, both of the conditions of stress and as an adjustment adaptive mechanism to such conditions. As will be shown here below, a large-scale out migration has occurred since the early 1980's, evidently in response to the conditions of stress that prevailed during these years, coinciding with the drought and famine of the 1980's. In the past migration was rare, short, and occurred in contexts which involved travelling from one area to other neighbouring areas, especially for the procurement of food grains. Such migration occurred in *Dar Hamid* and *Dar Hamiar* in the past to better food producing areas: e.g. the *Nuba Mountains* and *DarFur*, when the food situation in the *Dar* was bad. Since the colonial period and in subsequent periods migration from *Kordofan* (as we have seen) has been officially encouraged, intended to provide cheap labour for the cotton producing areas along the Nile in the *Gezira Scheme* in Central Sudan. This official policy has occasioned migration from local *Kordofan* regions on a large scale. However, this type of migration has generally been characterised by certain features which were fundamentally different from recent migration. That earlier forms of migration occurred in normal years under no environmentally induced conditions of stress, but came as a response to certain social pressures and demands for the need for cash or for preparation for marriage or clothing for the family, therefore only undertaken by adult males. And mostly it took place in the off-farm dry season when there was little work to do in the villages. This migration therefore was voluntary, seasonal, involving adult males and was small in scale of only a few individuals. In the past, people had been home-bound and did not want to part from their homelands to 'foreign' lands. Migrating away from the *Dar* was an anomaly, and to migrate in search of wage and hired labour was a bit of a stigma. The recent phenomenal migration both indicates the precipitous conditions to which local conditions have degenerated, manifested in formidable stresses on the environment and on the local populations. In this context of the conditions of stress migration also becomes an adjustment and adaptive mechanism to the conditions of stress. This migration has evidently taken the proportions of a mass exodus from the countryside to the towns, to the centre and to outside labour markets, especially to the rich Arab States.

From table (25) below, it can be seen that migration has abruptly increased to unprecedented proportions in the early 1980's.

Table 25 Breakdown of Migrant Numbers as % of Village Population & Households in 1983-5, 1990-present						
Village/Year	Total Population			Breakdown of Households		
	<i>population no. migrants</i>	<i>% to population</i>		<i>no. of houses</i>	<i>no. of houses with migrants</i>	<i>% to households</i>
1- Omdofais	1122			185		
1983-85		26	2.3		26	14
1990-present		45	4.0		38	20.5
Total		71	6.3		64	34.5
2- Al-Saata	2000			285		
1983-5		10	0.5			
1990-present		10	0.5			
Total		20	01			

Field-Work Data 1993.

Obviously this signifies that migration has emerged exclusively as a social phenomena in response to socio-economic pressures exacerbated by the drought of the 1980s. Indeed, the trends of out-migration have occurred earlier, as early as the late 1970's in a much attenuated form. But it increased with the gripping stress conditions on the local populations. Migration nearly doubled during the period between the years of 1980s and 1990/91. This suggests that it is not the periodic outbursts of drought leading to conditions of stress and famine that drive people out from their homes, but that a more pervasive poverty lie at the root of the problem. Had it been for the transient conditions of stress associated with a periodic drought and famine episode, it would have been that people, must have returned to their home villages and resumed their normal lives after the incident has passed. But this is not being the case, as return time is getting longer, and that those who have migrated have stayed away either temporarily or permanently, and those behind are seeking to leave their homes in ever greater numbers. All of these facts attest to the conclusion that the root cause of the problem is not droughts and famine stress, but a more deep seated poverty which forces village populations to leave their homes and families in search for livelihood.

Migration, while prompted by strong socio-economic pressure, is also an adaptive adjustment mechanism of vital significance to the livelihood and survival for many of the village households. From *Omdofais* with a population of 1122 persons, about 71 adult males (representing 6.3% of the total) have migrated to the Arab States; mostly to

Saudi Arabia and Libya in the 1983-85 famine period. The majority of these migrants have stayed in the host country either on a temporary or permanent basis. This migration contributes significantly and positively to the livelihood and survival of many rural households. From the 185 total village households, those having at least one migrant member away or returned, came to 64 households, making 34.5% (over one third) of the total village households. This is a significant percentage. But this also reveals that the small number of village migrants (6.3% of the village population) support over one third (34.5%) of the village households. If added to these families those kins and relatives whom migrants also support, the proportion of population who receive support from such immigrants greatly increases. On balance, it could be approximated that out migration contributes between 40-50% of the livelihoods of the village households. The nature of such vitally significant contribution of migration comes in the form of remittances and transfers of money which are generally expended in the purchase of the household food needs, other needs, and on investing part of it in buying some animals as necessary assets for future security. This is naturally the one viable investment avenue available in the local economy in the absence of other investment opportunities. Another important factor is that migrants contribution comes as clothes to family members, kins and relatives.

In summary, migration has become the single most important adaptive adjustment mechanism for the livelihood and survival of many village households. Households who have migrant members are better secured from those who do not. Such households are assured at least that they will have food available in the household. On the other hand, it is among those households who are not fortunate enough to have a migrant member, that we find the most vulnerable and most food insecure households. Among this latter most vulnerable category of the village households are those who are headed by women (see below).

7- 9- SEQUENCE OF LIVELIHOOD STRATEGIES IN THE FACE OF THE CRISIS:

7- 9- 1- Sale of Animals:

Animals represent the main source of assets for many village households. Therefore, sale of animals has to be selective and carefully considered, in order to preserve the household assets. Sale starts with the males and non-productive animals in normal times. However, during the drought years, animals have to be sold anyway, lest they die for lack of fodder. The massive liquidation of animals causes a glut in the market, and animal prices crash as a consequence. The irony of famine for the herd owner is that during famine animal prices and food prices go in reverse ratios: while food prices rocket very high, animal prices plummet decimally low (see terms of trade above). The famine years represented an enormous loss of assets for the local village populations,

especially for animal owning households, reducing many of them, and indeed, entire communities to absolute poverty and assetlessness (Curtis et al 1988). Entire communities lost their herds of animals either by sale or death, amounting almost to complete decapitalisation. The following table shows the rates of animal loss through sale, disease and death;

Table (26): Rates of animal loss by death, sale and disease:

year	cattle % Loss			Sheep % Loss			Goats % Loss			camels % Loss		
	sale	diss	dth	sale	diss	dth	sale	diss	dth	sale	diss	dth
1981/2	-	25	05	7.5	2.4	2.4	25	16	07	31	-	-
1982/3	11.4	8.6	14.3	17.4	8.2	14.8	27	18	21	08	16	13
1983/4	15.4	20	50.8	22.2	2.1	15.8	30	03	12	28	-	13
1984/5	31.5	-	68.6	54.1	7.2	36	71	04	14	48	12	29

Source: Regional Ministry of Agriculture; Kordofan, 1986.

The estimated rates of animal loss ranged from between 85 to 96% the total animal population in *Dar Hamar* and *Dar Hamid* respectively. The emaciation and weakness of the animals due to lack of fodder forced herd owners into massive distress sale at abysmally low prices. A large part of the animals simply died. The sale of animals during the famine years becomes indiscriminate, and extends from the males, and non-productive animals to include females and productive animals in the breeding age which form the household's basic capital assets. The loss to the herd-owning households has been severe, rendering many households virtually assetless; as can be seen from the table:

Table 27 Average size of ownership of herd stocks and loss between 1975 - 1985 (*Dar Hamid Area*)

Year	sheep	camels	cattle	goats	donkeys
1975	700	600	50	200	6
1985	40	40	2	3	1

Source: Regional Agricultural Statistics Office; El-Obeid 1993 (field-work data).

7- 9- 2- Sale of Valuables:

The local people under the weight of the stress are forced to sell out their valuables of gold, silver and jewellery, mainly the possessions of women. These represent the "last issue of resort" reserved for the most critical need of the family, against hunger, sickness, and other calamities. Women hold such possessions which they are able to reserve in good years from their own labour, or came as gifts in marriage. Such valuables serve a vital security function for women to be relied upon against all forms of

adversity, including the event of the husband getting another wife. During the famine, women had to part with their valuables, in the more dire need for food, thus incurring not only a depletion of valuable assets, but perhaps more critically undermining the long-term security of the household, especially depriving the women from their main source of security. Unfortunately, the prices offered for such valuables are extremely low during the famine years to such an extent that they can not pay even for the value of a small quantity of *dura*. The poor households become even poorer, having thus lost their last resort of assets, without having gained any short-term security of food. Indeed, one of the ironies of famine is that while it represents a massive drain of resources of the poor, it shifts such resources to the rich (Keen 1994). Local traders can buy the valuables of the poor very cheaply, while selling them food grains and other trade items very dearly. The terms of trade are heavily turned against them. One merchant in *Al-Saata* confessed that in the 1990/91 famine year, he bought 12 grams of gold for S£ 2100 Sudanese pounds from another merchant who bought the gold from the affected local people in distress sale. The local merchants bought gold from the distressed population for only S£ 75 per 1/4 ounce of gold, while selling them a *Melwa* (a *Melwa* = 3.2 Kg.) of *dura* for S£ 85, and for a S£ 100 that of millet. At the same time, a sheep fetched only S£ 13. Therefore, a pastoralist or villager would have to part from their last assets of valuables, and would need an ounce of gold to procure less than four *Melwas* of sorghum, and only three of millet. Ironically, while the poor desperately try to procure food by selling out their valuables and animals, becoming poorer in the process, the local traders can make wealth during the famine. Regional merchants and exporters too can accumulate colossal profits to their existing wealth derived from the proceeds of the grain trade and the livestock export business during the famine years. The majority of the village households failed to secure the food they need, either from their own production, or through the market (by exchange of the value). As a result of the food entitlement failure, the village households had to resort to other less attractive strategies as the stress continued. These included strategies of local self help and then dietary adjustments.

7- 9- 3- Local self Help:

Local self help included various forms of adjustment strategies. These follow a long-standing tradition of reciprocal obligations of socio-cultural and religious import. It is possible to discern those that involve kins help, those of reciprocal self help, and those that involve charity.

7- 9- 3- i- Kins Help:

This type of local self help involves forms of redistribution between kins and relatives, such that resources of food, money and animals move from relatively better-

off members to their poorer kins who are in more dire need. This form of help, especially during famine, is considered rather obligatory to the extent that relatively better-off of the village members will have to support their needy kins and relatives. This form of help can continue during famine time until the stress is over, or until the giving party has nothing more to give. Fortunately, remittances and transfers from migrant members to their families and relatives constitute an important form of this type of help during the famine in 1983/85 and 1990/91. Another form of this type of kins help involves providing free meals for relatives. During the famine, many of the relatively better households who had some food stocks, provided free meals for their kins and relatives who had not, thus mitigating the severity of the hunger effect.

7- 9- 3- ii- Reciprocal Self Help:

This form of local self help involves giving out and receiving food and money reciprocated between households on an ad hoc short-term loan basis according to availability of resources. During the famine years when the majority of the village households are in need and resources are in short supply, some of the households may have something coming which they can share part of it with another family on a short-term loan basis. This will be repaid a few days later when the borrowing household in turn have something coming . This form of reciprocal help is vital during famine and it essentially ensures that the members of the community share the available resources during times of dearth. This form of reciprocal help can also be employed in normal times, but it assumes especial significance during the famine times, and becomes more frequent. It greatly helps to mitigate the effects of famine, although in the course of the prolonged dearth and scarcity of food, quantities of food or sums of money that can be reciprocated on short-term loans get steadily smaller. At this stage, defaulting may also occur as in-coming resources dry up in the process.

7- 9- 3- iii Charitable Forms of Local Self Help:

This type of local help during times of hardship and famine involves giving as charity, especially of food, animals, or money from the wealthy to the needy. It does not necessarily occur among kins, and is not repayable . The wealthier among the village community such as traders and other better-off members give out quantities of food or sums of money to the most needy among the village households. It is known in the village community who is most in need. Also those who can afford, may provide free meals to be shared collectively at homes or in the shops in the market place. Another form of this type of charitable help involved contributions from the village members who can afford it to be collected and given to those most in need in the village, or to those immigrants from the more destitute pastoral groups who need help most urgently.

This form of help is summoned as an emergency rescue operation with implications that the target members are at imminent risk if help is not forthcoming.

These various forms of local self help have been the most effective strategies to mitigate the worst effects of famine, and kept at bay the menace of mass starvation. Admittedly, it is for the effectiveness of such strategies that mortality rates during the recent famines have been strikingly low among the village populations. Indeed, the people in the village of *Omdofais* in *Dar Hamar* reported no incidents of death during the famines in 1983/5 and 1990/91 that are directly associated with shortage of food. However, they reported the death of a child under five in *El-Obeid* relief camp where the mother took refuge with her children in the 1990/91 famine. In the village of *Al-Saata* in *Dar Hamid*, the village inhabitants reported no incidents of death among their members, but reported that there were several deaths from among the pastoral groups who settled in and around the village. But even here, the death cases are attributed more to infectious diseases such as diarrhoea and other diseases associated with malnutrition than with actual starvation.

An important lesson for policy-making can be drawn from the local self help institution. It points to the fact that the famine affects the village populations unevenly; that is; there are some of the village households who are relatively better-off than others; and that these better-off segment are obligated to help those weaker members of the community. As can be inferred, during times of protracted famine, this form of help can render both the giving and receiving ends vulnerable. Therefore, early intervention targeting the weaker end of the village households can go along way in halting the slide of the entire community from slipping into a state of complete exposure to famine.

7- 9- 4- Dietary Adjustments:

As the stress continued, the village households adjusted their food consumption strategies in various ways to stretch the capacity of the meagre food resources still available to them. Such adjustments included cutting down on the quality and quantity of food, by mixing grains, and reducing the number of meals per day; and also priorities for who is more entitled to the food that is available.

7- 9- 4- i- *Cutting down on the Quality of Food:*

Quality goes first; as households put up with the better quality food grains; i.e. *dukhn*, and shifted to the consumption of less preferred grains e.g. *dura*. Other more nutrient components such as dried meat (*sharmout*) followed. Most of the village households ate poor quality diet derived from *dura*, made in the form of *asida* or *kisra*, and poor quality (*mulah*) or gravy with which to eat the food.

7- 9- 4- ii- Cutting down on the Quantity of Food :

As the stress continued and the food reserves become more and more exhausted, the households resort to the more stringent strategy of reducing the quantity of food to be consumed. Thus, a household who in normal times consumes a *Melwa* of grains per day, cut down their food consumption level to half of that, and continue reducing that gradually. The village people reported that it is rare during the famine to find a household who ground a *Melwa* or two, and only the affluent can afford it. Most of the village households ground only about half to a quarter of a *Melwa* at a time to carry them for a day or two. Although food grains are available in the village shops, the people lacked the means to buy the available food. Only after the household managed by some means to obtain some cash, were they able to buy a small quantity of *dura*, mostly not exceeding half a *Melwa*.

7- 9- 4- iii- Mixing Dura with Melon Seed:

This is an important food adjustment strategy during famine. As reserves of *dura* became rapidly depleted, households resorted to mixing the remaining meagre stocks with melon seed. Usually, the mixture is about two melwas of melon seed crushed and chaffed and mixed with half a *Melwa* of *dura* flour. This is then cooked in a form of a porridge, reputed to be more nutritious than *asida* prepared from plain *dura* flour. This food adjustment strategy is intended to stretch the available food to the maximum capacity limit possible. Unfortunately, one of the causes of acute hardship in the 1990/91 famine is that this strategy has been rendered ineffective by commercial hoarding of the melon seed harvest. It has been reported by the village informants that the Faisal Islamic Bank has bought massively almost the entire melon seed crop in 1989/90 harvest in Western Sudan. The Bank's agents offered a price of S£110 - 120 per sack of melon seed until they have bought effectively the entire harvest causing an artificial scarcity and consequently the prices rose sharply. Later they sold the crop at the price of S£1000 - 1200 a sack, realising a profit margin of %1000.

7- 9- 4- iv- Reducing the Number of Meals per Day:

Households reduced the number of meals per day from three to two, and then to one. Reducing the number of meals is a clear index that the food situation reached a very critical stage. It is at this stage that some members of the household will have to forego food altogether for a day or two, sparing the available food for those members of the family who cannot withstand the pangs of hunger; namely children. Children have priority entitlement to the available food, then the rest of the family. Children also shared food with relatives and neighbours, if they had not have food at home.

7- 9- 4- v- Tapping Forest Food Resources:

This is an important strategy during famine. It involved resort to foods not normally used. Foremost, such foods included the collection of wild forest berries, mainly the *mukheit* (*Boscia Senegalensis*) and the *haskaneit* seed. Resort to the *mukheit* berries on a wide scale in the recent famines has been reported to be the life support for many families in the villages. Many of the poorer village households collected these berries and brought them to home in big quantities. These berries in order to be edible, were first crushed and the bulb extracted from the shell, then soaked in water for three to four days, putting fresh water repeatedly until the bitter toxic taste is removed. They were then dried under the heat of the sun for about two to three days until they are completely dry. Then they were ground into flour and cooked. This somewhat lengthy processing may not always be thoroughly carried through, and the final food product may be toxic, causing diarrhoea, and many of such instances of toxic poisoning were frequent during the famine and are largely attributable to eating unusual foods.

The combined effect of all such diverse strategies of coping is to stretch out the capacity of the meagre available food resources to the maximum limits in the face of the famine. They have been effectively deployed and managed to keep at bay the most ravaging effects of the famine and averted the occurrence of death among the village populations. But evidently, these strategies although have been vital in keeping people alive, indeed underline in striking colours the degree of hardships and the amount of suffering the local populations have been experiencing for the many years in the build up of the famine. Although people managed to save their lives, the depth of their trauma can never be fathomed. To be sure there is a deep sense of betrayal felt by the peoples in rural *Kordofan*, which in time will ripe in great dynamic force for change.

7- 10- THE EFFECTS OF FAMINE:

One of the obvious effects of the famine is that it represented an enormous drain on the household assets. The massive decimation of animals rendered many households virtually assetless during the famine years. A survey study in rural North *Kordofan* revealed that herd size which averaged about 2.0 livestock units per capita by the end of 1983, dropped to 0.26 units by the end of 1985- a drop of 86 per cent. The largest drop occurred in cattle and sheep (IFPRI 1991). Animals were sold in distress sale in large numbers, and fetched very low prices, or else they died. Moreover, the drought conditions, poor grazing and diseases have also taken their toll in reducing animals fertility and retarding subsequent restocking rates, thus slowing households chances of recovery. Households also lost their assets of valuables during the famine years in the quest for food. The valuables fetched very low prices in the market. The famine thus represented a dangerous depletion of the household asset base, rendering many households to absolute poverty and making them extremely vulnerable to the slightest

future shocks. This underlies the fact that once famine has stricken the local population, the consequent critical asset depletion it caused, renders its victims extremely vulnerable to future shocks, and this can explain the succession of consecutive famine disasters affecting the same vulnerable groups again and again. Indeed, the development of three big famines affecting the local populations in *Kordofan* (and other vulnerable groups in Sudan), one after the other in a short period of less than two decades, can only be explained in the light of the extreme vulnerability caused by loss of assets over long years of stress. The important lesson to be drawn from this is that once the conditions of rural poverty are allowed to slide precipitously and famine occurs, the local populations thus affected will be permanently caught in a state of chronic vulnerability and endemic famine, which will take a long time and costly efforts to regenerate livelihoods and restore former conditions of security. This conclusion can be confirmed by the fact that since the 1983/5 famine disaster which so ravaged the local economy, and until today, the local populations in *Kordofan* can be said to be caught in a state of endemic famine which needed everlasting presence of relief efforts. This could have been altogether avoided with far less effort and resources had there been timely intervention to arrest the slide in the first instance. But official neglect, corruption, grotesque failure, mismanagement and abuse of power prevented that from happening. The famine has to a large extent been the result of negligence on the part of the governments and the country's ruling and middle classes. It is the result of a failure to care for the food security of the people; failure to organise and encourage production, failure to store, and failure to distribute to the destitute (Shepherd 1988). The colossal failure on the part of the authorities allowed the famine to develop in the first instance, caused this dangerous massive depletion of rural resources and assets, crippled the chances of rural recovery, and ultimately placed the rural populations in a state of permanent vulnerability to famines. The most sinister effect of the famine is perhaps that it makes its victims ever more vulnerable and exposed to future shocks.

7- 10- 1- Economic Effects: Loss of incomes and employment:

The immediate effect of the famine is that it set in motion a host of adversaries that have been in process for many years. One immediate effect is that it precipitated a decline in economic activity, caused a critical erosion in the natural resource base which in turn impelled the local populations to sell out their productive assets. Eventually a wide-spread collapse of purchasing power translated into market failure to lay effective market demand to food, although food is physically available in the market (Sen 1980). The ultimate effect of the famine is that it triggered into motion the state of adversaries which for so long have been weakening the local system, exposing it to natural shocks.

The massive asset depletion during the famine resulted in a big loss in farm employment, and a consequent loss of incomes derived from farm labour estimated to

be between 70 - 75 per cent that of normal years (IFPRI 1991). Many of the poorer village households have for many years depended on off-farm agricultural wage labour as an essential part of their incomes. This source of income has been severely curtailed by the famine, and the percentage of families who worked as local agricultural labourers dropped from 18% in 1983/4 to 3.1% in 1984/5 (Ibid). But this drop does not mean that people had shunned agricultural labour. On the contrary, this drop occurred at the same time that there has been a glut of people seeking work. The ultimate result is that depletion of assets, coupled with loss of incomes from agricultural farm labour, combined to drive more people in the wage labour market, causing a glut. Increased participation of women in the wage labour force is particularly notable. Women became more fully engaged in the wage labour market both at the local level as agricultural farm labourers and in the towns in housekeeping jobs and petty employment. Wage rates consequently dropped as a result of the glut in the labour market, such that a day of labour could buy only 2 Kilograms of millet in 1984, compared to 6 kilograms in 1983.

7- 10- 2- Demographic Effects:

The direct demographic effect of the famine is that it caused a drop in population numbers and growth. The drop in population numbers is particularly significant in the short- term owing to the massive out migration from the villages. Population growth rates dropped by about 0.4%; from 2.7% to 2.3% between 1983/4 and 1984/5 (Ibid). No excess mortality rate was evident in the villages during the famine. The crude mortality rate increased only very slightly, but not as high as expected in a year of low and poor food intake and high incidence of disease. There is no evidence of low fertility among women. It should be noted that significant demographic changes did occur in the more Northern areas of *Kordofan*. Here, the famine mortality was much higher, and there is evidence of permanent out-migrating to the central region of *Kordofan*, especially to *Dar Hamar*, and to Central and Eastern parts of Sudan. This massive out-migration is the crucial factor in demographic change in the hard-hit areas.

7- 10- 3- Health Effects:

It is important to recognise that the famine has brought types of diseases hitherto unknown among the local communities. It is generally regarded that this area of the semi-arid environment is one of the healthiest due to its immunity from many infectious and bacterial diseases associated with humid climates. Also that traditionally people relied in their diet on milk and millet which provided high nutritious food, therefore, people general health was good. The famine has brought diseases associated with malnutrition such as stunting among children, various bacterial diseases such as diarrhoea and conjunctivitis. One particular disease that was unknown in the local environment previous to the famine is yellow fever (typhoid). Typhoid is reported to

have claimed twenty deaths at Um Badir in 1984/5 (Oxfam 1985; Shepherd 1988). The disease is thought to have been brought to the villages by those members who have been displaced to the cities, and returned to their home villages at a later stage carrying the infection with them.

7- 10- 4- *Social effects:*

There is evidence to suggest that there has occurred some fissures in the social fabric which bound the local social milieu. The relaxed generous atmosphere, hospitality and support which characterised local social relations in the past, is shaken; and in place there is unease, anxiety associated with feelings of insecurity, and preoccupation with personal affairs which are more characteristic of a differentiated individualistic style of life. Social relations are becoming increasingly personalised, family ties are weakened, especially among the poorer groups, reflected in prolonged periods of separation of family members, and sometimes of abandonment. People are more in a hurry to earn a living, little time is spared for socialisation and to considering other members' problems, money is becoming more and more the stamp of life, which has to be gained by all means. This has led to the phenomena of begging and prostitution in the towns, especially from amongst the displaced populations. The feeling among the ordinary villagers is that they regard themselves to be "not the same" with the merchants, for example, and that generally, people have become less sympathetic, less compassionate and less considerate as they were. A sense of being "better/secured" prevail among the better-off groups, such as the village merchants which engender competition and sometimes feelings of bitterness among the less fortunate ones. There is indeed signs which suggest that a mood of nascent class formation is emerging among the village populations, in which the merchant groups clearly occupy the upper hand while the poorer groups fall in the lower grades in the social scale.

7- 10- 5- *Effect on Education, and long-term political consequences:*

One of the most important effects of the famine is that it led to a high rate of school desertion. Many of the families either abandoned their villages taking the children with them, and thus abandoned schooling, or they simply cannot afford the extra expenses involved in schooling, or needed the children's work to earn an extra income. Two studies which were carried out in Eastern *Kordofan* at the height of the famine in 1985, revealed that the famine had indeed have a significant negative effect on education in *Kordofan* countryside. The studies found that in five villages, the number of school children numbered about 760 pupils at the beginning of the 1984/5 school year, and by January 1985, the number dropped to about 330, indicating a 50% rate of school desertion among the village school children (Ibrahim 1985, Adeel 1985). The implication of this is a two-fold political effects, with long-term negative ideological

and political bearings on *Kordofan* local communities. On the one hand, loss of education opportunities necessarily entails that these younger generations instead of finding other avenues of livelihood generation through education away from eking a living from the land, they are thus tied even more to the land as agricultural producers, evidently adding more pressure to the already exhausted land. On the other hand, these younger generations are hoped through education to lead the process of rural social liberation from the bondages of exploitation and marginalisation, to form the nuclei for rural political consciousness in order that the central authorities are forced to concede the hitherto neglected rural communities a measure of political power and economic share. The loss of education means that the local rural masses are thus being deprived from this liberalising dynamic force of rural social change, and the status-quo is thus permanently maintained against them and in favour of more powerful central groups. In the context of social class formation, loss of education which provides the only ladder to social mobility, means that the loosing poor groups are placed in the unenviable position of being fixed to the disadvantaged status of a working class culture in a peripheral economy.

7- 11- THE BENEFITS OF THE FAMINE:

It is possible to assume that timely and effective intervention from the part of a responsible government and a humane international system, aimed to avert the development of famine in the first place, would have rendered all of the waste and subsequent suffering unnecessary. After all, as Keen (1994) has rightly suggested, for some groups, not all is waste. Indeed, for some, famine represented an ample opportunity for gain, wealth and power, and the human suffering involved is immaterial and inevitable. Keen suggests that as there are losers for the famine, there are beneficiaries; too, and the two are enmeshed in a dialectical relationship of loss and gain: while one end loses, the other gains. This implies that resources do not recycle in a vacuum, but are transferred from the weak and poor to the powerful and rich. No doubt this is an illuminating insight, and informs and directs us to look into the other direction; i.e. there are important interests to be served by the famine both inside and outside Sudan. Even more, the conditions of famine may be actively sought and deliberately created (Keen 1994). The grain merchants, the commercial farm owners and the national agrarian lobby, the livestock dealers, the export/import businesses are some of the national interest groups who benefited from the famine. Other beneficiaries include international firms and industries supplying provisions for the relief efforts, powerful international agrarian interests, the transport industry, employment, are some of the international interests served by the famine. In sum, a cursory look at these interests who stand to gain from the famine reveals that all of these have a common

denominator, as functionaries of the market forces, either in Sudan or outside. In short, famine can be "good for business".

The famine years were fat years for the organised grain trade lobby, who control the national and regional markets. The famine provided the long-awaited opportunity for the organised and officially condoned looting of rural resources. A handful of regional grain merchants were able to control the grain trade all over the region, fixing prices, and making enormous profits in the process. These regional merchants are allied to the more powerful national agrarian lobby who in turn have close connections and interests with the ruling political establishment at the top echelons of decision-making. Both coordinate the operation of the grain trade; in transport, distribution and sale. They have the ability and means to transport the grains from areas of surplus production in the commercial mechanised farms in the central rain lands of Sudan (in *Gedaref*, *Kosti* and *Habila*), to areas of consumption, e.g. *Kordofan*. The regional grain merchants act as a cartel, and their collusive practices involve hoarding the grains, aided in the storage capacity by big banks such as Faisal Islamic Bank and other market beneficiaries, who enter the lucrative trade as speculators actively involved in buying, hoarding and selling the grains through their agents. They store the grains for any length of time assured of demand in a state of general scarcity, and allying the government officialdom to their side against the interests of the general public, they were able to demand and fix extortionate prices on the grains, making them practically out of reach for many local consumers. While famine rages in *Kordofan* countryside, the merchant class gets fatter in body and pocket, while the government authorities silently watch the loot, indeed themselves effective beneficiaries.

Conclusion:

This chapter has sought to establish that famine is a crisis in society. It is a crisis caused not so much by natural phenomenon such as drought, but by long-term political and socio-economic factors which are responsible for creating the state of vulnerability of the rural populations to conditions of famine. The drought and the associated harvest failure cannot alone explain the state of utter weakness and vulnerability of the village populations. We have seen that the people in the two villages do not suffer from lack of resources in terms of land, animals or labour power. But that these resources have been subjected to vicious exploitation by merchants through market forces. Indeed, while some people suffer from famine, others benefit by accumulating wealth and power. Nonetheless, in spite of all adversities, people adaptability enabled them to survive the worst effects of famine.

Conclusion

This study has aimed to explain the persistence of famine in Kordofan of Western Sudan. The contribution of the study has been to offer a better understanding of famine in Sudan for effective policy making to control or eliminate famine. The argument has been that conventional explanations of famine have been conceived hastily at the time of "crisis", and therefore tended to offer only partial, and sometimes conflicting explanations. These explanations, moreover, have sometimes been fanned by distorted media representations and of images of famine in Africa. Conventional famine theorists have marshalled a variety of causes of famine which have been confusing and offered poor guidelines for effective policy-making. The result of deficient theory has been that after all the "well-intentioned" efforts, famine still persists in Sudan and elsewhere. There are naturalist explanations which locate the problem in natural phenomena such as droughts, floods, earthquakes which translate into acute shortage of food (Food availability Decline FAD). These immediate factors are taken to be the main causes of famine by proponents of FAD and which the media has depicted. But these precipitating factors trigger deep-rooted vulnerability into famine only when the affected population become critically exposed to immediate shocks. Population theorists, on the other hand, deplore what they perceive to be overpopulation, overstocking and overcultivation which they regard to exceed the land's carrying capacity and cause a breakdown of normal livelihoods for large numbers of populations. Economic explanations such as the Entitlements Theory pose the problem in economic terms as an issue of "entitlements failure" in which the victims of famine are those who fail to lay "effective market demand" to the food they need even though the food may be physically available in the market. This study has reviewed five major approaches advanced in the literature as explanations of famine. These are: the Naturalist thesis, the Population thesis, the Holistic approach, and the FAD (Food Availability Decline) and Entitlements approaches. The review gives a reappraisal of these five perspectives, highlighting the core of arguments, followed by a critique or counter-arguments.

The Naturalist thesis attributes the causes of famine to natural phenomena; such as drought, rainfall patterns, desertification, etc. According to the naturalist school, the persistence of famine in the Sudan/Sahel zone is understood to be a direct result of prolonged drought conditions that persisted since the early 1970s, leading to widespread or localised famines as occurred in the early 1970s, the mid-1980s and early 1990s.

The Naturalist thesis, however, has been the target of intense criticism. Critics have pointed out that evidence from many past as well as recent famines suggests that there is no direct logical correlation between drought and famine. And concluded that famines do not necessarily follow from droughts, and that droughts themselves may originate from adverse human actions. The causes of drought are a subject of controversy and debate. Those of the Naturalist school explain the origins of drought - as the prime cause of famine - in purely natural terms: i.e.; climatic characteristics, rainfall patterns, wind movements, oceanic sea-surface temperatures, etc., all or some of which are responsible for creating the conditions of drought. Proponents of the Holistic approach dismiss this naturalist explanation as simplistic, uni-dimensional, and one that is basically non-critical ignoring the complex interaction between natural, human and biotic elements that make up a biological habitat. Ecologists have pointed out that a balanced relationship between the natural environment, the human society, and the animal and plant species in a given habitat determines the degree of sustainability or otherwise of that particular environmental system. That states, planners, and commercialists have paid little attention to these interconnections indeed contributed to create environmental problems. Explanations of famine in natural terms that translate into "Food Availability Decline = FAD" in fact tolerate such environmentally-insensitive approaches to development planning, indeed perpetuate such approaches since they make no claims against state policies or human actions which negatively affect the environmental systems. Explanations such as FAD can even encourage state "smugness" about food availability, perceived to be a condition of natural factors, and not of state responsibility in terms of production, distribution, and entitlements (Sen 1981).

The causes of drought are a subject of wide controversy and debate. Critics of the Naturalist thesis marshalled a chain of arguments pointing to the human agency (or anthropogenic) factors that create the conditions of drought. While not categorically rejecting the role of drought in the chain of causality of famine, critics place drought in a terminal stage, as the final trigger or catalyst that brings a whole chain of causes into their final conclusion of a famine disaster. But that drought itself can be seen to result from human actions begs question as to how valid and defensible is the naturalist thesis in explaining drought and famine in purely natural terms in isolation from their anthropogenic determinants. The Holistic view of drought which adheres to a structuralist paradigm, points to the responsibility of both individuals and states to have adopted ecologically damaging farming and stocking practices and development policies, as well as the functioning of a distorted market system. This view invokes a notion of drought as an "environmental problem", i.e. a product of people's relationship with nature (Redclift and Sage 1994).

The Population thesis is another theory advanced to explain the occurrence of famine. The Population thesis owes its origins to the 18th century Malthusian debate on the menace of over-population. Writing in 1798, in his famous "Essay on the Principle of Population", Malthus warned that the earth had limited resources to feed its ever-increasing populations. He argued that while food supply increased on arithmetic ratios, the earth's population increased on geometric proportions. Malthus concluded that as a result of the imbalance between the two variables, a situation would inevitably arise where the ever-increasing population numbers outstrip the available food supplies, and large numbers of people would perish for lack of food (Malthus 1798). According to Malthus, famine represents a necessary check to harness population growth within the limits of available resources.

Various contemporary versions of the old Malthusian concept continued to echo the basic tenets of the argument over a limited capacity of natural resources vis-à-vis ever-increasing population densities of both humans and animals. Thus, the "Tragedy of the Commons" is another modern variant of the old Malthusian concept which blames environmental degradation and associated food problems to overstocking of animals. It has been argued that overstocking exceeds the land's carrying capacity to sustain excess herd populations, therefore, the range deteriorates causing loss of grass cover which leads to droughts and environmental degradation. Consequently, drought causes famine, and results in elevated death rates among humans and animals, therefore reducing the charge, and the balance between resources and population is maintained.

The Population thesis has been attacked on a number of fronts. First, the basic argument of the Malthusian concept that the earth has limited resources to support the ever-increasing population densities has been shown to be lacking. A major counter-argument is one that recognises the overwhelming potential for agricultural growth. Agriculture is seen to be capable of carrying infinitely greater population numbers. An elastic "carrying capacity" of agriculture has been estimated to support between 5 - 17 times the present charge of world's population (Boserup 1981, 1965; George 1976; Gribben 1979, Simon 1981). And that increased populations rather than being a negative factor, can indeed be an added impetus to enhance agricultural growth in terms of labour and for providing extensive markets for agricultural commodities.

Another important argument against the Population thesis is the one that emphasises the importance of levels of consumption of global resources rather than the numerical force of population per se. This recent argument contends that although population numbers in poor countries are far greater than those in rich countries, the key issue is that it is the population in the richer countries who consume by far the overwhelming share of global resources. Notwithstanding the fact that the richer countries of the world

host only 24% of the world's population, they consume on aggregate about 85% of global resources. This argument recognises that the occurrence of famine among the poor cannot be blamed on population increases, but that it is a matter of mal-functioning in the utilisation and distribution of resources on both national and international levels. If resources are equitably distributed and shared among people between and within states, there would be enough for every person on earth to be fed adequately. Food, or lack of it has become an issue of power and ability, and the occurrence of famine among the poor is a clear reflection of their inability to command that power. It is not a matter of population increase vis-à-vis limited resources.

Another approach to explaining famine is one that advocates a broad holistic framework which encompasses diverse factors: internal, external, and historical. This approach adheres to a structuralist paradigm of reasoning which sees the causes of famine to be interactive and inextricably linked to one another, therefore, cannot be separated theoretically for analytical purposes. Rather, the causes of a given famine situation would have to be understood in totality in the specific context of that situation. As can be expected, the Holistic approach encompasses diverse and widely divergent themes. Internalist explanations, for example, focus attention on the specific internal situation in poor third world countries where famines frequently occur. Internal factors include issues relating to domestic economic and development policies, that foster class formation and create inequalities, biased agricultural policies favouring cash crops production destined for outside markets and against food production directed to the internal market. The character of states is an important theme which draws attention to the nature of political structures and the forms of social political organisation in poor countries, which are characterised by the dominance of urban-based elites, and their control over rural resources, ostensibly for the national good, but in practice only to consolidate their own political power and economic stakes. In all of these domains, the rural peasantry loses in the processes of internal politics.

Ecologists within this school argue that historically, the adaptability of people living in semi-arid environments had insulated them from the vagaries of the natural environment. That these peoples learnt to adapt their way of life and levels of production and consumption to the opportunities and constraints of their physical environment. That the human social demands have been synchronised within the limits of natural resources, such that human, animal and plant lived in harmony in their physical surroundings, thus keeping the eco-system in equilibrium (Scott 1984; Prothero 1974; Watts 1987; Hasewell 1953; Swift 1973). The mechanisms of adaptability of populations to their natural environment have for millennia enabled the maintenance and reproduction of the system on fairly stable bases. It is only recently, at certain historical conjunctures, through the inroads of colonialism, individualism, and capitalist

penetration that those old systems of survival have been weakened and rendered incapable of supporting their populations.

Externalist proponents, list a catalogue of external forces which bear negatively on the economies and societies of poor third world countries. In particular, they have cast considerable blame on the legacy of colonialism; that it had had debilitating effects on those countries which inherited a huge colonial baggage that crippled the capacity of recovery of these countries until today. Colonialism has crafted arbitrary national frontiers which divided ethnic communities of common ancestral descent across different state boundaries that in due course became unstable and a subject of disputes and conflicts. As a result, the numerous protracted conflicts and wars such as the ongoing civil war in Southern Sudan and other countries throughout the third world, are a legacy of the colonial carving of arbitrary frontiers. Such conflicts and warfare precipitated the internal food situation directly by disrupting food production, and indirectly by channelling the bulk of national resources to the cost of wars. Colonialism has also initiated the forces of capitalist penetration in these hitherto traditional communities, organised markets that have become highly dependent on the international market economy, and keyed to the export of commodities of interest to external markets (Glantz 1987). At the eve of independence, the colonial administration carefully bequeathed political and economic power to those elements of society who were perceived to be potential partners in the benefit of trade. Therefore, the post-independence era witnessed the emergence of political and economic national elites dedicated to the pursuit of policies laid down by the colonial state in perpetuating the processes of extraction of surplus labour in the context of the dependent weaker economies tied to the international capitalist market. This state of dependency progressively eroded any chances of emergence from stagnation.

The colonial structures for extraction of surplus labour through direct intervention in the re-organisation of forces of production has in recent history been replaced by a "neo-colonialist" indirect strategy of what has come to be known by the "comparative advantage" theory of economic growth. This implies that the comparative advantage of many poor third world countries lies in the continuation of exportable primary production directed to the needs of external markets (Raikes 1988; Glantz 1987). This strategy has been forcefully pushed by international development agencies such as the World Bank and the IMF to such an extent that it is often imposed on third world countries. As we have seen in the case of Sudan, that the Sudanese government - in order to receive loans - has been forced to forsake its programme for increased food production in favour of expanding the production of export crops such as cotton and groundnuts. This imposition on the part of the World Bank - often justified in terms of comparative advantage - coincided with the prevalence of internal food insecurity so

widespread that it frequently led to widespread famines. Comparative advantage theory assumes that cash earnings from sales of cash crop exports would be used to purchase food from big food producers such as the USA. There is no evidence, however, from famine situations to support this argument. On the contrary, encouraging cash crops production, could contribute to increased food insecurity, since the small producers may be inticed by various mechanisms of the market (e.g. through price incentives) to concentrate more on producing cash crops, and may neglect food production.

Comparative advantage strategy of export-led growth has brought a host of problems to poor developing countries such as Sudan. On the one hand, proceeds from cash crops dwindled over the years, both as a result of steadily declining prices of primary commodities in the international market, as well as declining production and productivity in the local economy. On the other hand, the dwindling returns have to be stretched to the limit to pay for essential imports: capital goods, energy, as well as food imports; the price of which have increased steadily. The imbalance between steadily dwindling returns from cash crops export sales and steadily increasing value of imports has strained the meagre foreign reserves to breaking point, and created chronic balance of payments deficits which has to be rectified by borrowing from international financing institutions. Inevitably, debt has emerged as a big problem facing poor countries, which effectively crippled the economic performance of these countries, limited their scope for emergence, and slimmed their chances of recovery. By the mid-1980s, for example, Sudan's total debt stood at about US\$ 13 billion, with annual service charges claiming over 85% of Sudan's total value of exports (Ali 1985). This is a debt burden that is totally impossible for the Sudan economy to sustain without incurring lasting damage to the economy and considerable hardships on the Sudanese people. Indeed, the frequent occurrences of famines is a testimony to the extent of hardships, which could have been much mitigated had the country been able to direct its meagre financial resources to purchasing food, than committing these resources to meet its debt obligations.

Other themes in the Holistic approach include the activities of agribusiness multi-national corporations, and the way they manipulate the international food trade in production, distribution and consumption. The activities of giant multi-national firms dealing in foodstuffs on a global scale exercise oligopolistic control over much of the food stuffs entering the world market. The power of these giant firms is immense, and backed up by their respective governments, food has become in the hands of these multi-nationals an issue not just of trade relations, but a potent political and strategic weapon. The USA, for example, under its PL 480 uses food aid as an important aide to the US diplomacy and foreign policy. These multi-national corporations have been criticised that they set the pace for and determine levels of production, control the channels of distribution, and manipulate international market prices in ways that

damage the prospects of small peasant producers and throw them out of the market. The policy of disposal of massive quantities of food aid on grants or on low-priced concessional terms lures governments in poor countries to neglect food production and concentrate more on cash crops production.

Although the Holistic approach covers a wide range of issues in the famine debate, the main contention against it is precisely its merit; that is, the multiplicity of factors it raises in the discussion on famine. The eclectic character of this approach, we argue, raises a rather heterogeneous mix of factors that are seemingly unrelated to one another as to form a logical coherence to qualify for a theoretical framework. Internalist explanations, for example, raise issues that differ fundamentally from those raised by externalists, while both also differ from those advocated by ecologists and anthropologists. However, a common denominator among these diverse arguments, which paradoxically is at the same time the real challenge facing this approach, is the relevance of all factors to the discussion on famine. How to resolve this paradox of heterogeneity and relevance of factors is what this study has sought to contribute.

The last two approaches examined in this study are the Entitlements and the FAD (Food Availability Decline) approaches. These are discussed together in conjunction with one another in view of the numerous aspects of similarities and differences between them. The FAD approach holds that famine arises from a significant decline in the volume of food available in relation to population demand, a fall caused by a natural or a human disaster, such as a drought or war. Critics of FAD have questioned the basic criteria used to measure food decline. That, there is no specific criteria to determine a threshold at which food can be said to have declined or otherwise. Again, they have pointed out that evidence suggests that famine may develop even under normal conditions of food availability. Conversely, famine may be averted even under precipitous levels of food production. Evidence from famine situations invalidates the argument that famine is caused by a decline in food availability. FAD uses an aggregative method, and assumes that since adequate supplies of food are available to meet aggregate per capita food demand, there is no reason why some people should go hungry. Critics have pointed out that this simple aggregation fails to take into account neither the distribution side of food, nor the differential abilities of different social groups to satisfy their food demand. It is not enough that food is available in the market. What is at issue is whether people are able to buy that food to satisfy their need for food. If people cannot lay effective market demand by being able to buy the available food, famine can develop even under abundance of food supply.

The Entitlements approach, on the other hand, stresses the importance of distribution (not availability) in food supply, and differentiation in access to it among different

social groups. Entitlements emphasises that different social groups have different commanding abilities over the food they need commensurate with their economic power. In the market place, command over food follows economic power that can translate into effective market demand, and tends accordingly to be unevenly distributed among different social groups. Economically weaker groups will fail to establish command over food even though it may be available in the market. This is a major dividing line between the FAD and the ET. While FAD remains broadly aggregative, focusing on the overall availability of food, the ET is essentially disaggregative acknowledging the differential commanding powers and the resultant distribution constraints that befall various segments of society. FAD treats famine as a food problem. It locates famine in the natural and normal, and thus implies uniformity and neutrality. The ET, on the other hand, views famine as an economic disaster, created by a ruinous collapse in the purchasing power of some social groups, and a consequent collapse in their entitlements to food.

The ET logically raises issues of power and social differentiation. It recognises the importance of how people establish or fail to establish their entitlements to food. The ET ascribes the vulnerability of some groups to famine such as farmers and pastoralists to inexorable laws that prevail in economic systems which endorse legally sanctioned rights of private property and ownership, and delineate social/economic orders that go hand in hand with some people failing to acquire enough food for survival (Dreze and Sen 1989). The failure of food entitlements among some groups underlies a malfunctioning of the whole system of the legality of rights operative in society. The critical question for the ET is to say why is it that some people or some groups fail to establish the legal rights to the most basic of all needs: the entitlement to food? Why such people remain so vulnerable in relation to the laws of ownership and exchange?

Evidently, the legal rights of ownership and exchange are mediated daily through the market. The ET does not question the processes of social power at work underpinning the apparently standard rules operating in the market place. The market is a socially created nexus whose rules have been normalised and legitimised in ways to serve the interests of powerful groups. The ET does not question the apparently normal socio-economic relations governing entitlements and market relations. The Et does not go far enough to construe the socially differentiated power in the struggle over food and over resources. The ET does not take us far inside the arena of the market; it brings us to its threshold, notwithstanding.

The various theoretical approaches discussed above have been advanced in the literature as explanations of famine. The reappraisal of these theories which is presented in chapter two of this study exposes the inadequacy of these approaches in offering a

comprehensive framework of analysis for the phenomenon of famine. The inadequacy of the different theories resides in the impropriety between the complexity of the phenomenon and the simplicity and partiality of the explanations offered. That is; while famine is a complex phenomenon which results from a complex multiplicity of factors, the different theories, on the other hand, each tackles only one or a few of these factors; therefore, tend to offer at best only partial explanations. The naturalist thesis, for example, focuses attention on natural causes, such as drought, leaving unanswered the whole ensemble of human, social, political, ecological and historical factors that are at work in generating famine. The Population thesis, on its part, gives primacy to the effects of unproportionate growth of human populations in relation to available food resources, paying little attention to the politics of resource availability, management and control. The ET, from a different angle, gives an economic explanation; but fails to account for how and under what conditions some groups become economically weak to such an extent that they suffer a complete collapse in their food entitlements. These various approaches to explaining famine offer, to the best, only partial explanations, which, nonetheless, give us useful insights in the way of understanding the tangled complexity of the phenomenon. The real challenge for famine theory is to advance a theoretical framework that is sufficiently broad to accommodate, in a comprehensive way, the complexity and multiplicity of factors that generate famine.

In this regard, the Holistic approach presents itself as the more appropriate frame of analysis, precisely because it addresses a wide range of issues that are relevant to the discussion on famine. The major shortcoming of this approach is that it raises an eclectic diversity of heterogeneous factors that seem to have little in common as to form a coherent theoretical framework. The Holistic approach, as we have seen, encompasses a wide diversity of causes: i.e. internalist, externalist, ecological, anthropological, social and political. Moreover, it does not altogether deny the role of natural or human agency, but places these into their proper contexts. The real challenge for the Holistic approach to stand as a useful comprehensive theoretical framework is how to bring the multitude of factors into coherence as to form a unified whole. This is what this study has sought to contribute to the debate on famine.

This study has sought to put the diversity of factors of famine in context by placing them into a broad historical perspective. This has been applied to the context of Sudan. It has studied two rural communities in *Kordofan*, of Western Sudan who have been affected by recurrent famines in recent history. The study traces the developments in the social and political history of these two communities, and examines the processes of change over time, which we consider to be responsible for creating the conditions of vulnerability among these communities, and their susceptibility to famine. These processes have been accounted for on three levels: on a macro level, involving the state,

state policies, the national and international underpinnings of such policies. On a regional level, the study explores the policies of transformation and the processes of change on the local level, particularly taking place at the regional centre of power at *El-Obeid*. At a micro-level, this focuses on the processes taking place at the grass roots level in the villages, and the concrete forms of household responses to the process of famine as it unfolds. Here, a case study of two villages has been conducted, and the results shown in the final chapter of the study.

In Chapter three, we have constructed a picture life of old *Kordofan* before the 19th century. The purpose of this historical reconstruction is to ascertain the validity of the thesis that people who live in arid and semi-arid environments adapt their way of life to the opportunities and constraints of their physical/natural environment. We have seen that the two local communities of *Dar Hamid* and *Dar Hamar* living in the semi-arid savannah of North *Kordofan* indeed pursued a way of life centred around pastoral production that was ideally suited to the conditions of their environment. They were autonomous independent communities who managed and controlled their productive resources entirely for the purposes of social reproduction of their system, independently from state authority and control. They forged political and trade alliances with two old indigenous Kingdoms that flourished in this part of Sudanic Africa: the *Fur* and the *Fung* Sultanates, and benefited, indeed prospered from a lucrative trans-Saharan trade that linked them with Mediterranean, Egyptian and Eastern markets. Accounts of travellers at that period confirmed that these communities were of the wealthiest groups in this part of Africa. There was no mention of widespread famines to be found in these accounts.

However, that prosperity and wealth vanished in subsequent histories of the region, owing largely to the gradual incorporation and assimilation of these communities into the fabric of the modern state since the beginnings of the 19th century onwards. The rise of modern state structures since 1821, the time of the Turko-Egyptian rule in Sudan, ushered in a new era in the history of *Kordofan* and its relation to the central Sudanese state. The rural communities in *Kordofan* gradually lost their former autonomy and political independence to the authority of the state, and the former control over their productive resources gradually shifted from their own hands to the state and other forces allied to it; particularly traders and commercialists. Although the tempo of these shifts of power has been somewhat low-keyed during the Turko-Egyptian rule and during the Mahdiyyia, the pace accelerated to such rapidity and force hitherto unprecedented during the British colonial administration since 1898, the year the British colonial rule over Sudan was formal established under the Condominium.

The Condominium administration in Sudan set up the structures of the modern Sudanese state in its own image to be subservient to the demands of the British market. From its inception, the modern Sudanese state has been moulded in the dependent capitalist economy, precariously connected to the British and international markets. The Sudan economy and society have been developed along these lines. The *Gezira Scheme*, a major development project, was primarily a colonial construct intended to satisfy the needs of the powerful lobby of the British textile industrialists (E.C.G.A. = the Empire Cotton Growers Association) for raw cotton. To this major colonial project set along the Banks of the Nile in Central Sudan were linked the diverse rural economies in the hinterland of *Kordofan* and other regions, as peripheral feeder economies to provide cheap labour and cheap resources. Along these lines of capitalist expansion, the whole of *Kordofan* rural economies have been re-organised and transformed from their former state of autonomy to ones that are increasingly opened up to market forces in both production and consumption. We have documented that the re-organisation and transformation of *Kordofan* rural economies necessarily required a corresponding restructuring of forces in which *Kordofan* be politically marginalised in the internal balances of power; as a necessary pre-requisite to pave the way for the economic exploitation of the region's vast resources of wealth in agriculture and livestock. Accordingly, the processes of political marginalisation and economic exploitation of *Kordofan* have historically gone hand in hand.

The policies of transformation of *Kordofan* local economies rested on a fundamental policy of development thinking; a policy that advocated a shift from pastoralism - regarded as an outmoded practice - to agricultural labour production for the market. In essence, this key policy aimed to transform the rural *Kordofan* communities from autonomous independent pastoralists into a vast pool of agricultural labourers who are easily manipulable by the state, to produce for both the internal as well as to the outside market. Thus, cash crops production came to assume supremacy over pastoral and food production. In consequence, the rural populations became increasingly dependent on the market for both production and consumption; their margin for autonomous action severely curtailed. The forces of the market became the most important determinants in many aspects affecting peoples lives, especially with regard to food. Moreover, the market in *Kordofan* has become a monopoly largely in the hands of the *Jellabah* and other traders from North/Central Sudan who exercise exploitative control over all aspects of trade in the region. As a result, at times of natural disasters such as a drought, and short-fall in food production, the grain merchants manipulate the market and precipitate an already dangerous food situation into a famine. The policies of development and transformation, the succession of shifts in power and resultant changes in *Kordofan* rural economies since the turn of the century, have combined to create

patterns of vulnerability among the local communities never witnessed before. We have seen that, some centuries earlier, these communities were prosperous, independent and largely insulated from the vagaries of nature through their own indigenous systems of adaptability and survival. Today, these same communities witnessed their independence shattered, their resources pillaged, and their own survival threatened through the agency of the state and its policies.

The usefulness of the Holistic framework put in a historical perspective for the study of famine is that it provides the logical context within which the eclectic diversity of factors become more coherent and meaningful. Applying this framework to the study of famine in *Kordofan* of Western Sudan, the diverse factors come out clearly in their proper historical, political and environmental contexts. We have argued that historically, the rise of the modern state in Sudan, and the gradual assimilation of *Kordofan* in its fabric, the advent of the colonial powers, the incorporation of the traditional local economies in modern economic structures, and the rapid transformation of Sudan and *Kordofan* economies along the lines of capitalist market, the dependency of these economies on the international market system and subservience to it, the ascendancy to power in the post-colonial Sudanese state by urban-based forces whose interests are intertwined with those of the colonial powers, development of local markets that are weak and distorted; all are some of the important factors that generate famine.

What has come out clearly from this analysis is the paramount preponderance of the role of the state in the genesis of famine. We have argued that the rise of the modern Sudanese state went hand in hand and parallel to a corresponding gradual yet steady weakening of the autonomy and security formerly enjoyed by the local *Kordofan* communities. The rural communities progressively lost control over their own resources to the state and the forces of the market that have been set in place by alien colonial powers; first by the Turks and Egyptians, then by the British. The colonial states set up political, economic and administrative structures whose function was to regulate the exploitation of rural resources to service the needs of the colonial markets. The Sudan as a whole has become a dependent economy in the international economic system. Resources from the rural areas, e.g. *Kordofan*, flow to the regional, national market centres, and to international markets beyond. This system of economic relations dictated a pattern of production and consumption among the rural populations that is heavily skewed in the market mechanisms as its most weak and peripheral participants; and hence have no control over its mechanisms, which nonetheless, determine to a large extent what they produce and consume, and consequently directly affect their daily lives. As a result of these long-term tendencies which have been a direct result of state policies created patterns of vulnerability among large segments of the society, patterns of social differentiation, and differentials in access to resources.

These long-term negative tendencies were hoped to be reversed during national rule. National Sudanese governments in the post-independence period could have been more prudent to have initiated policies designed to redress the imbalances and inequalities that inhered in the colonial state era. However, this has not been the case, and national Sudanese governments far from departing from those structures of dependency set by the colonial state, adopted policies that fostered, indeed perpetuated and enhanced those structures even further. Successive national Sudanese governments accentuated the patterns of dependency, of differentiation and imbalances to levels that have created conflicts, and widespread poverty and vulnerability to famine among large social groups. These effects indeed threaten the cohesion, stability and the very viability of the Sudanese state. These tendencies in the case of *Kordofan* have been a result of state policies which effectively relegated the whole of the region to a back-garden, as a vast reserve of cheap labour and cheap resources to be tapped for the benefit of the state and the forces of political and economic power allied to it. The region has suffered under the banner of the national state from political marginalisation and economic exploitation. These processes have become so acute that in the recent history the rural communities virtually lost control over their productive means, lost their security and livelihoods to such extent that they have become vulnerable to famine. Essentially, these negative effects have all been a direct result of long-term trends created by state policies. A field-work study has been carried out in two villages in rural Kordofan to assess the impact of change on the livelihoods of ordinary village populations. The field-work study shows that there are some groups among the village households who have become more vulnerable to famine than others, suggesting a process of nascent socio-economic differentiation is emerging among the village populations. Some groups have benefited from the processes of contemporary change, while the majority have lost.

Some broad conclusions could be drawn from this study. Foremost, any efforts directed to restore lost food security among the rural populations would have necessarily to redress the imbalances in the state power, and the structures of dominance and subordination within it. The basic issue here is power which we reckon is by far the most important factor in explaining famine. The study of the state brings out the social forces and socio-political arrangements that make up the balances of state power. Any attempt to alleviate the conditions of poverty and vulnerability of the rural populations to famine would have to recognise the basic question of power, and seek to "empower" those vulnerable groups and enhance their channels of representation and presence within the active functionaries of the state. "Empowerment", we argue, is the key issue to stem hunger and famine in *Kordofan* and elsewhere. But, as we have also seen, the Sudanese state is not an autonomous entity that is wholly independent of the forces of international power. We have seen that the Sudanese state is not totally free to pursue

development policies aimed to expand food production to achieve food security of the Sudanese people. International interests have been the prime movers in determining the shape and direction of the Sudan's agricultural and economic policies. Powerful international interests press ever more strongly on Sudan to remain an exporter of cash crops such as cotton and groundnuts, committing its most fertile and productive lands to this type of agriculture, at the expense of food production. Such mightier international power leaves fewer options to a weaker country such as Sudan to pursue strategies designed to achieve internal food security. It follows that, under such international pressures, policies aimed to empower the local populations within the functional machinery of the state would be of little benefits unless the international system becomes more benign and conducive to the welfare and food needs of the vast majority of people in poor countries.

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Appendix A:

Refugee Population in Sudan until December 1991

State	Assisted Refs.	Spontaneously Settled	Total
Eastern	353317	457000	810317
Central	010060	020000	030060
DarFur	021141	097000	118141
Equatoria	-	050000	050000
Khartoum	-	040000	040000
TOTAL	384518	664000	1048518

Source; High Commission for Refugees, Khartoum, in EWS Bulletin, Jan. 1992.

Appendix B:

Estimated Displaced Population in Sudan till mid-October 1991.

State	Town	No. of Displaced	Subtotal
Central	Kosti	61979	349379
	Gabalain	37000	
	El Butana	20400	
	Sennar	20000	
	Ed Damazine	150000	
	El Dinder	13000	
	Singa	47000	
Khartoum	Khartoum	168000	712000
	Omdurman	287000	
	Eastern Nile	257000	
Eastern	Tokar	4700	92883
	Halaib	1250	
	Gedaref	50000	
	El Rahad	4574	
	New Halfa	20000	
	Kassala	4500	
	Sinkat	7850	
DarFur	Nyala	41200	327444
	Ed Daein	59953	
	Buram	25000	
	Zalingai	86129	
	Wadi salih	36635	
	El Fasher	5000	
	El Geneina	34205	
	Kutum	16322	
	Um Keddada	23000	
Kordofan	Dilling	7268	159665
	Kadugli	50397	
	Rashad	52000	
	El Salam	18000	
	En Nahud	17000	
	Sheikan	15000	
Equatoria	Juba/ Rural Council	287000	
	Yei	22400	
	Maridi	33000	
	Mundari	37538	
	Ibba	13100	

	Yambio/ Nzara	35000	
	Eizo	11000	
	Tombura	15300	
	Rayamini	900	
	Terekeka	10500	
	Rokon	15000	480738
Bahr El Ghazal	Wao	47596	
	Aweil/ Rural Council	35000	
	Rumbek/ Tonj	39000	
	Raga/ Rural Council	35000	
	Gogrial	27500	184096
Upper Nile	Malakal	84000	
	S. Malakal, Sobat	17000	
	Wad Shilluk	15000	
	El Rank	85000	
	El Rank/ Rural Council	90160	
	Bentio/ Mayroum	20000	
	Maban	15000	
	Fangak	26000	
	Kodok	288	
	Wad-Kona	31977	384425
S U D A N		2690630	2690630

Source; High Commission for Refugees, Khartoum, in EWS Bulletin, Jan. 1992

Appendix C:

Total Sorghum Production in Sudan and per Capita Food Availability (1960/1 - 1984/5)

<i>Year</i>	<i>Production (000s tons)</i>	<i>Production - Export (000s tons)</i>	<i>Production (kg/person)</i>	<i>Production - Export (kg/person)</i>	<i>5-year Avr peoduction / capita-Ex (kg)</i>
1960/1	1051	n.a.	95	n.a.	
1961/2	1434	n.a.	130	n.a.	
1962/3	1267	n.a.	115	n.a.	
1963/4	1349	n.a.	122	n.a.	
1964/5	1137	n.a.	103	n.a.	113
1965/6	1095	n.a.	99	n.a.	
1966/7	851	n.a.	60	n.a.	
1967/8	1980	n.a.	141	n.a.	
1968/9	869	n.a.	62	n.a.	
1969/70	1451	n.a.	103	n.a.	93
1970/1	1534	1502	109	107	
1971/2	1590	1535	99	99	
1972/3	1300	1206	81	75	
1973/4	1692	1603	94	89	
1974/5	1681	1636	93	90	95 (91)
1975/6	2160	2086	120	115	
1976/7	1789	1685	99	93	
1977/8	2062	2015	115	112	
1978/9	2193	2021	122	112	
1979/80	1462	1176	81	65	197 (99)
1980/1	2068	1827	115	101	
1981/2	3272	2859	181	158	
1982/3	n.a.	n.a.	n.a.	n.a.	
1983/4	1829	1573	102	87	
1984/5	1110	n.a.	61	61	114 (101)

Source: Shepherd 1988; (p: 62).

Appendix D:

The Economic Results from the Gezira Scheme to the Companies from 1926 - 1950
(in E£)

<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>
<i>Crop Year</i>	<i>Co.'s Share of Net Divis. Retn.</i>	<i>Co's Share Inclu. Intr. Char. to Jt. Acc. & Tenant</i>	<i>Companies' Expenses</i>	<i>Balance</i>
	E£	E£	E3	E£
1925 - 6	582,281	622,008	215,763	406,245
1927	759,319	821,487	278,888	542,599
1928	573,954	632,979	223,557	409,422
1929	699,630	771,666	237,226	334,440
1930	192,702	293,779	188,060	105,719
1931	85,552	211,653	226,237	14,584 (Lss)
1932	495,807	647,178	190,348	456,830
1933	193,299	309,867	214,288	95,579
1934	226,841	329,317	220,407	108,910
1935	470,425	574,742	250,355	324,387
1936	451,386	556,506	280,524	275,982
1937	618,832	715,201	311,647	403,554
1938	451,104	527,148	290,667	236,481
1939	485,285	568,195	274,878	293,317
1940	581,958	659,806	240,528	419,278
1941	621,993	709,871	217,809	492,062
1942	616,261	693,687	214,870	478,817
1943	776,878	847,266	221,545	625,721
1944	533,584	608,303	237,131	371,172
1945	837,611	912,602	260,047	652,555
1946	516,938	584,692	270,189	314,503
	10,771,640	12,597,953	5,064,964	7,532,989
1947	1,372,042	1,465,512	301,716	1,163,796
1948	2,339,120	2,447,716	336,423	2,111,293
1949	2,741,206	2,861,206	401,243	2,459,963
1950	3,189,374	3,319,374	541,108	2,778,266
	20,413,382	22,691,761	6,645,454	16,046,307

Source: Gaitskell 1959: 171.

Appendix E:

List No. 1: North Sudan Consultative Council

Babu Osman Nimir	Chief Nazir of the Missieriyya
Yahya Ahmad Omar	Deputy Nazir of the Gawam`a
Abdalla Bakur	Nazir Dar Bakur
Mohammad Mohammad el Amin Turuk	Cief Nazir of the Hadandawa
Mohammad Ahmad Abu Sinn	Nazir of the Shukriyya (el Butana)
Ibrahim Musa Madibu	Nazir of the Rizeigat
Mohammad Bahr el Din	Sultan of the Masaliit
Abdel Rahman Adam Rijal	Maqdoum of Niyala
Ayubiyya Abdel Majid	Head of the Local Government at Berber
El Zibeir Hamad el Malik	Head of the local Government at Dungula
Hassan `Adlan	Mek of the Funj Section
Fahal Ibrahim	Shiekh of Haj Abdalla District
Ahmad Yousif `Alqam	Sheikh of the Middle Section (Merkaz of Southern Gezira)
Idris Abdel Gadir Salih	Nazir of the Hassaniyya Administration
Sarour Mohammad Ramli	Shiekh of the Northern District
Khalil `Akasha	Merchant; El-Obeid
Psman Abdel Gadir	Sirr (rep.) of Merchant; Halfa
Hassan Shieklawai	Government Employee
Hamid el Sayid	Chief Clerk; DarFur Province
Mekki `Abbas	Adult Education Inspector
Merghani Hamza	Engineer; Public Works Department
Mohammad `Ali Shawqi	Assistant Registrar; Lands Department

List No. 2: The Legislative Council: Representatives of Northern Sudan

Zubair Hamad el Malik	Head of the local Government at Dungula
mohammad Taha Sourij	Head of the Shaiqiyya Court
Mohammad Ibrahim Farah	Nazir of Shindi District
Sarour Mohammad Ramli	Nazir of the North District
Abdalla Ayoubi	Member of Berber Court
Mohammad Nassir	Shiekh of the Western District
Mohammad Ahmad Abu Sinn	Shiekh of the Shukriyya 3rd District
Mhammad Mussa`ad	Nazir of the Mussalamiyya
Ahmad elHaj Yousif el Tam	Nazir of the Central District
Ahmad Abdel Bagi Mohammad	Agent of the Managil station
Osman Ali	Shiekh of Sinnar District
Yousil el `Ajab	Rufa`a el Sharaf

Hssan `Adlan	Mek of the Funj Section
Yousif Idris Habbani	Deputy Nazir of the Habbaniyya
Mustafa Ahmad OuNour	Deputy Nazir of the Hadandawa
Ja`afar Ali Shieklai	Nazir of the Halanga
Mohammad Mohammad el Amin Turuk	Nazir of the Hadandawa
Ahmad Hamad Abu Sinn	Depity Nazir of the Shukriyya
Abdalla Bakur	Nazir of Dar Bakur
Mohammad Tumsah Siemawi	Nazir of Dar Hamid
Salih Fadl Allah	Deputy Nazir of the Kababish
Mun`im Mansur	Nazir of the Hamar
Babu Osman Nimir	Nazir of the Misiriyya
Amir Ali `Isa	Kek of the Nuba
Sa`eed Ali Matar	Rep. Nazir of the Gawam`a
Mirghani zaki el Din	deputy nazir of the Bideiriyya
El Melik Rahamt Allah Mahmoud	Head of El Fasher Court
Ibrahim Musa Madibbu	Nazir of the Rizeigat
Abu Abdel Rahman Moh. Bahr el Din	Deputy Sultan of the Masalit
Ibrahim Dau el Biet	Shartai& Deputy Head Court East Darfur
Mohammad Moh. Nour Abu el-Kull	Shiekh Dium; North Khartoum
Mohammad Abdel Gadir Idris	Omda of el Ghubsha
Mohammad el Haj el Amin	Former Govn Employee
Mohammad Salih Dhirgham	Former Govn Employee
Ahmad el Hashim	Former Shiekh (Teacher); Institute of Learning
Abdalla Adam	Former Govn Employee
Abdel Fattah el Maghribi	Former Govn Employee
Sbdel Karim Mohammad	Former Govn Employee
Badawi Mohammad Ali	Former Govn Employee
Abdalla Khalil	Agricultural and Business Enterprises
Mohammad salih el Shinqiti	Agricultural and Business Enterprises
Al-Sayid Abdalla el Fadil	Agricultural and Business Enterprises
Mohammad Abdel Rehman Nugd Allah	Agricultural and Business Enterprises
Mohammad Hamad el Birrir	Business Enterprises
Omar Agabein	Business Enterprises
El Zein Ibeid Ahmad	Business Enterprises
El Haj Mohammad Abdalla	Business Enterprises
Ahmad el Jid elShiekh Al `Abbass	of the Dignitaries
Mohammad el Khalifa Sharief	of the Dignitaries
Nawal Mohammad Rijal	of the Dignitaries
El Tayib Adam Jelli	of the Dignitaries
Abu el Qasim Ali Dinar	of the Dignitaries
Abdel Hamid Abbakar Ibrahim	of the Dignitaries
Mohammad Adham	Doctor
Zein el `Abdeen Abdel Tam	Doctor
Fadul Bashir	Journalist

List No No. 3: Northern Members of the House of Representatives (1954 - 1957)

Mohammad hamad Abu Sinn	Nazir of the Shuriyya (Kassala)
Abdalla Bakur	Nazir of Dar Bakur
Mirghani Hussein zaki el Din	Deputy Nazir of the Bideiriyya
Tayfour Mohammad Shareef	shiekh; `Aliyab District
Majdhoub Ibrahim Farah	Brother of Chief Nazir of the Ja`aliyyin
Al Shareef e-Sayid el Faki	Deputy Nazir
Mahmoud el tayib Salih	Brother of Shatrai of Dar Ghala & Clerk of Native Court
Abdel Rahman Mohammad dabaka	Brother of Nazir of Bani Halba
Abdel rehman Musa Madibbu	Brother of the Nazir of the Rizeigat
Arbab Ahmad Shattah	Shartai
Hassan Jibreel Suleiman	Omda of el Gineinah
Mohammad el Siddiq Mohammad Talha	Tribal Leader
Fadl Allah Ali el Tom	Brother of Chief Nazir of the Kababish & Head of Sodari Native Court
Hmmad Mohammad Daf`a Allah	Omda & Son of Former Nazir of Zuruq
Hammad Abu Sadur	Brother of one of the Nuba Mount Meks
Idris el Zaibag	Omda of el `Abbassiyya
Rahamt Allah mahmoud	Heda of El Fasher Native Court
Bannaga Mohammad el Yom	Omda of El Burus (a tenancy in Gezira)
Abdalla Mohammad el Tom	Shiekh of the `Arakiyyin District (a tenancy in the Gezira)
Imam Daf` Allah Mahmmmad	Son of the Nazir of the Halawiyyin (a tenancy in the Gezira)
Mushawir Jum`aa Sahal	Son of the Nazir of the Majanin & Court clerk (business enterprises)
el Tigani Ibrahim `Ayiff	Brother of a Omda of Dar Hamid (agricultural & business enterprises)
Gism el Seid Abdalla el Nour	Shiekh of the Kawahla District (agricultural entrp. Funj Co. for Constr.)
Mohammad Ahmad Abu Sinn	Nazir of the Shukriyya(Rufa`a) (agric. entrp. Tawfiqiyya Agric. Co.).
Yousif al `Ajab	Nazir of Rufa`a el Sharq (agric. entrps.)
Abu Fatma Bakash	Former Shiekh of the Qash District (agric. and business enterprises)
brahim Idris Habbani	Deputy Nazir of the Hassaniyya (agricultural and business enterprises)
al Mardi Mohammad Rahmah	agri., industrial & business enterprises
Ya`qoub Hamid Babiker	business & estates enterprises
Majdhoub Ibrahim Farah	agricultural and business enterprises
Mohammad Mahmoud Mohammad	agricultural and business enterprises)
el Fadil Mahmoud	agricultural enterprises (an agricultural scheme, Blue Nile)
Mohammad el Amir Mahmoud	agricultural enterprises (an agricultural scheme, in the Funj)

Kamal Abdalla el fadil	agri., business & estates enterprises
Abdalla Khalil	agricultural and business enterprises
el Sayid el Sadiq el Mahdi	agri., business & estates enterprises
Hammad Tawfiq	agricultural enterprises; in Hassahisa
Merghani Hamzah	Profssional engineering enterprises (Bridgeman Rex Co. Merghani Hamza)
Mubarak Zarrouq	Professional legal business
Ibrahim el Mufti	Professional legal business
Mohammad Ahmad Mahjoub	Professional legal business
ohammad Amin el Sayid	Professional medical business
Khidir Mohammad	Business enterprises
Hassan Abdel Gadir	Business enterprises
Hashim Mohammad Sa'eed	Business and industrial enterprises
Mohammad Karrar Kujur	Business and industrial enterprises (Sawakin and North Rehabil. Co. & East Sudan Co. for Explorations & Mining)
Ibrahim Hassan el Mahallawi	Business and industrial enterprises (Sawakin and North Rehabil. Co. & East Sudan Co. for Explorations & Mining)
Majdhoub Abu Ali	Business and industrial enterprises
Mohammad Jubarah el Awad	Agricultural enterprises
Osman Ishaq Adam	Trade business, in Kutum
Mustafa Hssan Mohammad	Trade business at Niyala
Mohammad el Shiekh el Mikashfi	Trade business
al Wassyla el Shiekh el Sammani	Agriculture
el Shazhali el Shiekh el Bireir	Agricultural enterprises
Ibrahim el Tayyib Badur	Agriculture
Muhyi el Din Haj Hamad	Agricultural enterprises
Mohammad Ahmad el Mardi	Former Jurist Qadi
Ali Abdel rehman	Former Jurist Qadi
Muddathir el Bushi	Former Jurist Qadi
Ismail el Azhari	Former Govern. employee (teacher)
Hassan el tahir Zarrouq	Former Govern. employee (teacher)
Mohammad Haroun Timah	Former Govern. employee (teacher)
Abubakr Badri Abbakar	Former Govern. employee (teacher)
Omar Hamza	Former Govern. employee
Ibrahim Hassan Abu el Ma'ali	Former Govern. employee
Yahya el fadli	Former Govern. employee
Yousif Abdel Hamid Ibrahim	Former Govern. employee
Ya'agoub Rijal	Former Govern. employee
Abdel Nabi Abdel Gadir	Former Govern. employee
Hussein Mohammad Zaki	Former Govern. employee
Ahmad Idris Abu el Hassan	Former Govern. employee
Hassan Awad Allah	Former Govern. employee
Nasr Allah Sarmin	Former Govern. employee
Mohammad Bour el Din	Former. employee of Company
Abder Rahman Omar Abdel Majid	Former. employee of Company

Source: Awad, Mohammad Hashim; al Istiqlal wa Fasad el Hukm fi el Sudan (undated).

Appendix F:

List of Livestock Merchants in Kordofan, and Origins

Name of Merchant	Origin
Awad Kabbalo	from Northern Sudan
Abdel Hamid el Mahdi	from Northern Sudan
Al Sayid Taha El Hussein	Bassawli, originally from Egypt
El Haj Kardaman	from Northern Sudan
Ali Khidir Haj Ali	now settled in Egypt
Al Bireir	of Moroccan origin
Osman Salih	from Dongla, deals in livestock &
	agric. produce export trade
Fadlallah Adam El Gaddal	from El Obied, Shwaihi
Khalil Akasha	from Berber
Abu Zeid Hilali	from Berber
Hussein Abu Qadi	from El Damir, Kahli Abbadi
Zein el Abdeen Salih Abu Qadi	from El Damir, Kahli Abbadi
Geib Allah	from En Nuhud
Salih Abbas	from Dongla
Sharqawi	Palestinian, from Gaza
Amina Fantas	Palestinian, from Gaza

All have properties and possessions in Egypt. Merchants buy a bull for S£ 3-5 thousand, and sell it for S£ 15-20 thousand.

Personal communication during field-work 1993.

Appendix G:

Local Plant Species, Local and Latin Names

Local Name	Latin Name
Taraya	<i>Pterocarpus lucens</i>
Darot	<i>Terminalis brownii</i>
Hashab	<i>Acacia senegal</i>
Sunt	<i>Acacia nilotica subsp. tementosa</i>
Gumbil	<i>Cordia africana</i>
Sabah	<i>Anogeissus leiocarpus</i>
Leyun	<i>Lannea fruticosa</i>
Aradieb	<i>Tamarindus indica</i>
Talh	<i>Acacia seyal</i>
Heglig	<i>Balanites aegyptiaca</i>
Habil	<i>Cumbretum glutinosum</i>
Kuk	<i>Acacia sebryana</i>
Dom	<i>Hyphaenne thebaica</i>
Gafal	<i>Boswellia papyrifera</i>
Homeid	<i>Scierocarya birrea</i>
Tartar	<i>Sterculia setigera</i>
Tebeldi	<i>Adansonia digitata</i>
Dalieb	<i>Borrassus aethiopicum</i>
Kitir	<i>Acacia mellifera</i>
Arad	<i>Albizzia amara</i>
Bohenia	<i>Bohenia rufescence</i>
Sider	<i>Ziziphus spina-christi</i>
Abnous	<i>Dalbergia melanoxylo</i>
Godiem	<i>Grewia tenax</i>
Kadad	<i>Acacia</i>
Seder	<i>Albizzia anthetminthica</i>
Sarh	
Gobeish	<i>Guira senegalensis</i>
Ayal	<i>Acacia trotitus sub raddiana</i>
Kharoub	<i>Pilestigma reticulata</i>
Haraz	<i>Acacia albida</i>
Kolkol	
Shadar el Zaraf	<i>Maera angolensis</i>
Homron	<i>Bosica solicifolia</i>
Abu Sroug	<i>Prosopis africana</i>
Khashkhash	<i>Lonchocarpus loxiflorus</i>
Engato	<i>Mitragyna inermis</i>
Joughan	<i>Diospyros mespiliformis</i>

Source: Sudan Resource Assessment and Development (ARAAD); A Report 1992.

Appendix H:

List of Local Tree Species which Disappeared from the Locality

Local Name	Latin Name
Gafal	<i>Commifora africana</i>
Qudeim	<i>Grewia tenax</i>
Ban	<i>Eucalyptus aegyptea</i>
Shuheitt	<i>Combretum aculeatum</i>
Taraya	<i>Pterocarpus lucens</i>
Darot	<i>Terminalis brownii</i>
Sunt	<i>Acacia nilotica subsp. tementosa</i>
Gumbil	<i>Cordia africana</i>
Sabah	<i>Anogeissus leiocarpus</i>
Talh	<i>Acacia seyal</i>
Gafal	<i>Boswellia papyrifera</i>
Bohenia	<i>Bohenia rufescence</i>
Sider	<i>Ziziphus spina-christi</i>
Abnous	<i>Dalbergia melanoxylo</i>
Godiem	<i>Grewia tenax</i>
Seder	<i>Albizzia anthetminthica</i>
Kharoub	<i>Pilestigma reticulata</i>
Kolkol	
Shadar el Zaraf	<i>Maera angolensis</i>
Homron	<i>Bosica solicifolia</i>
Abu Sroug	<i>Prosopis africana</i>
Khashkhash	<i>Lonchocarpus loxiflorus</i>
Joughan	<i>Diospyros mespiliformis</i>
Qaddafa	
Khazam	
Mahul	
Fahaloub	
Shuk el Kilab	
Gaghjagh	
Um Kramadouda	
Um Wideika	

Field-work 1993.

Appendix I:

List of Local Plant and Grass Species which Disappeared from the Locality:

Local Name	Latin Name
el Biqueil	Blepharis linerifolia
um Libeina	
el Sa`adan (Si`id)	Cyperus rotundus
el Dahayan	Faristize longislique
um `Ajeina	Crotalaria microphylla
Abu Rakheiss	Andropogon gayanus
el Mahareib	Cymbopogen nervatus
Simeimah	Aristida pollida
el Natshah	Stylothansus sp.
Hereishah	Tephrozia sp.
el Qarn	Monsonia senegalensis
Sha`eer	Moneochma hespedum
Taqtaqa	Vigna sum-hum
el Nal	Sympogum nervatus
el Mahalab	Hibiscus sp.
Abu um Rakheesse	
el Humrah	Aristida sp.
el Marhabeib	
Halfi	
Ras el Qum	
Dur	
el Fazzara	
Abu Tartus	
Abu Raqda	
el `Usfur	
Flai	
Warri	
Taotao	
`Akash	
Fayoi	
`Ajour	Cucumis melo
Gashat el Ghazal	
Loubi el Ghazal	
Kadad Abu Rjeilat	
el Qatqat	Gegeiria allatum

Field-work 1993.

Appendix J:

List of Local Wildlife Species which Disappeared from the Locality:

Local Name	Latin Name
<p>(a) Animals um Tiqdi Abu Hussein Abu Shuk um Rishat Abu Jafnah Abu n Dlaff el Marfa`een el Zabadah Abu n Duluk um Qarfa</p> <p>(b) Birds: Quweir um `Akkar el Qata Abu Ruba Bitik Saqr el `Iqal um Jineinat um Reishat Gedad Abu n Qan`an</p>	

Field-work 1993.

Appendix K:

Sudan's Balance of Trade 1981 - 1986: (Value in £s. Millions)

	1981	1982	1983	1984	1985	1986
Exports-value	357.0	483.1	810.7	817.3	844.7	833.2
(% change)	(+31.6)	(+35.3)	(+67.8)	(+0.8)	(+4.1)	(-1.4)
Imports-Value	1177.6	1278.1	2129.6	1803.7	2128.8	2402.2
(% change)	(+49.4)	(+8.5)	(+66.6)	(-15.3)	(=18.0)	(+12.8)
Trade Balance	-820.6	-795.0	-1318.9	-986.4	-1284.0	-1569.0
(% change)		(+2.8)	(-65.9)	(+25.2)	(-39.2)	(-22.2)

Source> Bank of Sudan: 27th Annual Report 1986.

Sudan's Exports During 1981 - 1986

Commodity	1981	1982	1983	1984	1985	1986
Cotton	68.7	120.1	396.0	405.0	374.3	366.7
Groundnuts	66.5	33.2	16.5	26.7	23.1	2.5
Sesame	35.3	38.1	70.2	96.1	97.8	58.9
Gum Arabic	35.7	40.1	76.2	64.1	66.0	141.7
Dura	42.9	107.5	66.6	7.2	-	13.9
Livestock	35.9	62.2	80.2	92.6	159.4	71.5
Hides & Skins	77.9	8.9	13.8	17.4	38.8	33.7
Cake and Meal	14.6	14.0	24.0	26.2	3.5	14.2
Others	49.4	58.4	67.2	82.0	81.8	130.1
TOTAL	357.0	483.1	810.7	817.3	844.7	833.2

Source: Bank of Sudan: 27th Annual Report 1986. p: 22.

Sudan's Imports During 1981 - 1986 (in £S. millions)

Item	1981	1982	1983	1984	1985	1986
Pertroleum Products	175.9	337.7	458.5	415.2	318.4	202.3
Manufactured Goods	184.2	180.9	344.3	279.0	514.6	481.4
Machinery & Equipmnt	120.5	186.5	266.8	217.2	354.0	405.7
Chemicals	71.1	99.1	213.9	182.2	261.8	341.2
Transport equipment	93.3	160.5	173.5	148.8	241.6	434.1
Wheat & Flour	53.4	55.7	90.5	77.7	148.1	120.5
Tea	14.5	17.0	40.2	30.0	94.7	71.9
Coffee	3.9	3.9	3.8	15.9	19.6	12.2
Sugar	75.7	65.9	31.5	18.6	0.9	-
Other foods	28.2	59.0	86.4	53.7	125.0	155.5
Drinks & Tobacco	15.6	17.4	20.7	28.5	15.8	14.3
Textiles	30.3	30.1	30.8	23.9	34.2	71.1
TOTAL	866.7	1213.8	1760.9	1490.8	2128.8	2402.2

Source: Bank of Sudan: 27th Annual Report 1986. p: 23

Share of Sudan's Main Customers of Exports During 1981 - 1986 (%):

Customers	1981	1982	1983	1984	1985	1986
E.E.C.	30.2	25.8	24.4	24.6	19.9	28.1
Saudi Arabia	21.8	36.7	19.0	15.0	20.1	13.5
P. R. of China	4.8	5.1	9.2	4.3	0.1	0.1
U.S.S.R.	5.5	1.3	5.4	2.2	1.3	2.6
Japan	7.5	6.5	5.3	6.0	8.1	6.7
Egypt	4.8	2.5	4.7	8.3	10.0	8.1
Other Arab Countries	6.5	4.7	4.0	6.7	4.7	3.4
Yugoslavia	2.3	2.0	3.2	4.8	8.3	6.9
Other Social Countries	2.6	2.2	3.2	4.8	10.3	8.0
Other West Europe	3.9	3.1	2.2	2.0	1.7	0.8
USA	8.0	2.6	2.0	2.8	3.3	5.4
India	0.4	0.4	0.4	0.4	0.5	0.5
Other Countries	1.7	7.2	17.0	18.1	11.7	15.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Source> Bank of Sudan: 27th Annual Report 1986. p: 24

Share of Sudan's Main Suppliers of Imports During 1981 - 1986 (%):

Suppliers	1981	1982	1983	1984	1985	1986
E.E.C.	39.1	33.8	37.3	36.6	40.2	41.0
Saudi Arabia	14.5	16.3	16.6	16.1	16.3	14.9
U.S.A.	8.0	8.8	9.1	6.9	7.0	7.7
Other Arab Countries	7.1	10.7	7.7	10.6	6.1	4.4
Other Social Countries	2.5	2.5	5.1	4.0	2.0	2.6
Other West Countries	2.3	3.0	3.3	4.6	3.1	3.1
Japan	6.0	3.9	3.2	3.2	5.1	7.1
P. D. R. of China	3.6	2.2	2.4	2.0	2.5	2.8
Egypt	1.0	5.3	1.7	3.1	1.8	4.2
India	2.0	2.3	0.8	1.9	1.6	2.2
Yugoslavis	0.5	0.2	0.3	0.5	0.6	0.8
U.S.S.R.	0.1	0.1	-	0.1	-	0.1
Other Countries	13.3	10.9	12.5	10.4	13.7	9.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Source: Bank of Sudan: 27th Annual Report 1986. p: 25.